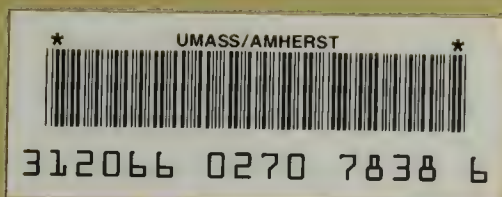


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EXECUTIVE OFFICE OF COMMUNITIES & DEVELOPMENT



Michael S. Dukakis, Governor
Amy S. Anthony, Secretary



THE MASSACHUSETTS HOUSING MARKET

Supply, Demand and Policy Indicators

January 1989

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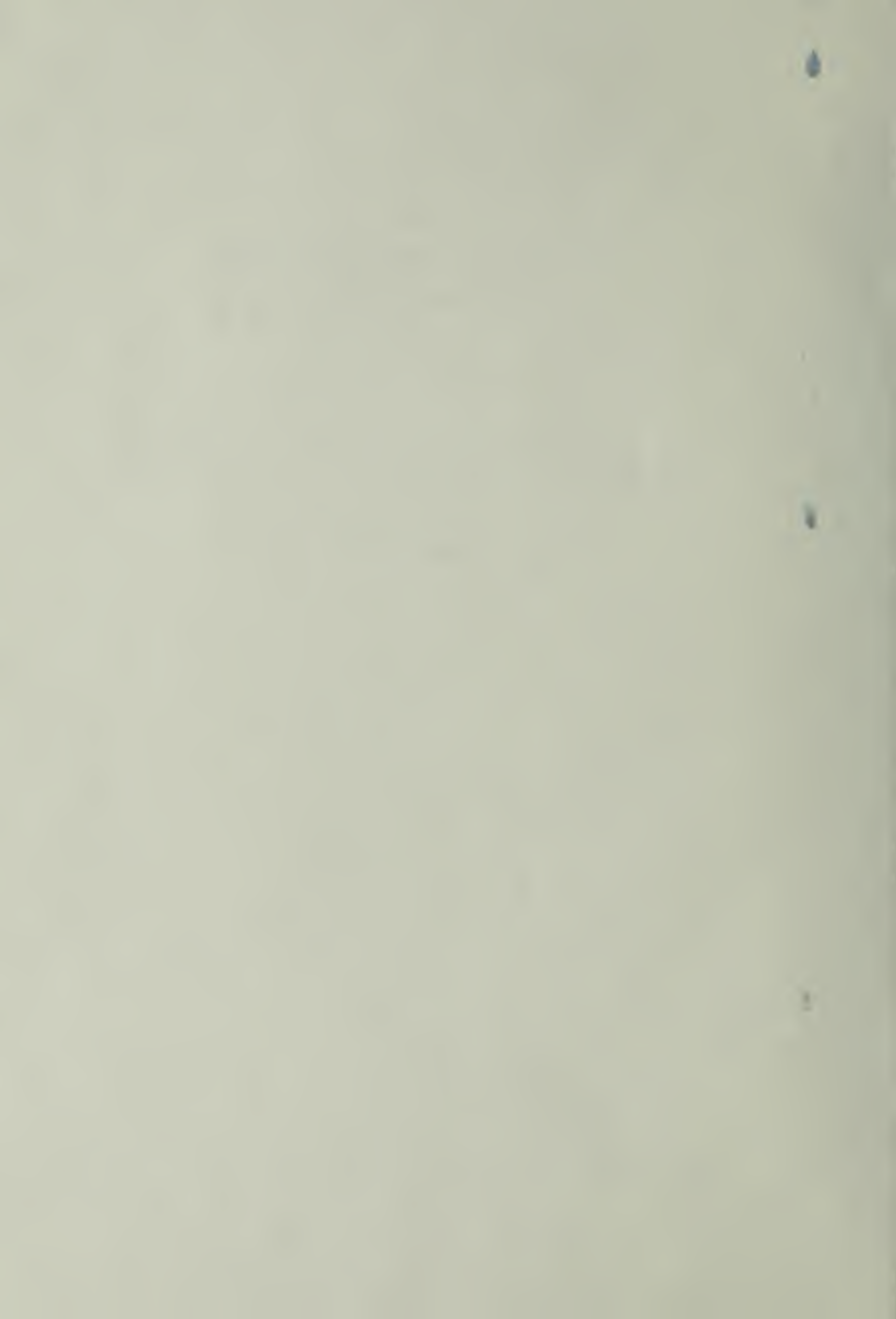
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THE MASSACHUSETTS HOUSING MARKET

Supply, Demand and Policy Indicators

Prepared for the General Court by the Massachusetts
Executive Office of Communities and Development

January 1989



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This report presents, for the most part, information derived from a study of the Massachusetts Housing Inventory and Policy Indicators, commissioned in 1987 through EOCD's Office of Policy (Peter Richardson, Director of Policy). The study was completed in mid-1988 by James Wallace, Sally Merrill, Meryl Finkel, and John Pitkin of Abt Associates, Inc., Cambridge, MA.

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Contents

Acknowledgements.....	i
Executive Summary.....	1
Introduction.....	4
Housing Supply.....	6
Housing Prices.....	15
Affordability.....	19
Subsidized Housing.....	34
Housing Demand.....	35
Assembling the New EOCD Data Base.....	42

Exhibits

1 Total Units in 1980 and 1986, by Planning Area.....	7
2 Owner Occupied Single-Family Homes, 1980 and 1986.....	8
3 Renter Occupied Units in 1980 and 1986, by Planning Area.....	9
4 Condominium Stock, 1980 and 1986.....	10
5 Percent Change in Total Units, Rental and Owner Occupied Single-Family, 1980 and 1986.....	11
6 Percent Change in Condominium Stock, 1980 and 1986.....	12
7 Percent of Additions to Condominium Stock through Renter Conversion and Adaptive Reuse.....	13
8 Median Price for Single-Family Homes and Condominiums--1986.....	14
9 1986 Planning Area Median Price Relative to State Median Price: Single-Family Homes and Condominiums.....	16

Exhibits (continued)

10	Percentage of All Households and Renter Households Who Can Afford a Median Priced Single-Family Home in Their Planning Area.....	22
11	Percentage of All Households and Renter Households Who Can Afford a Median Priced Condominium in Their Planning Area.....	23
12	Percentage of Single-Family Homes Median Income Households and Median Income Renter Households Can Afford to Buy....	24
13	Percentage of Condominiums Median Income Households and Median Income Renter Households Can Afford to Buy.....	25
14	Affordability Gap Between Housing Price Median Income Households Can Afford to Pay and the Median Price of a Single-Family Home.....	26
15	Affordability Gap Between Housing Price Median Income Households Can Afford to Pay and the Median Price of a Condominium.....	27
16	Rental Affordability Indicators: Rent Level as a Percent of Adjusted Median Taxable Income.....	28
17	Statewide Distribution of Rent/Income Ratios by 1986 Income Category (unadjusted taxable income data; net rent).....	29
18	Percent of Households Below the Poverty Level in 1980....	30
19	Property-based Subsidized Rental Units and Tenant-based Subsidized Housing As a Percentage of 1986 Occupied Housing Stock.....	36
20	Ratio of Population to Occupied Housing Stock 1980 and 1986.....	39
21	Adults Per Household 1980 and 1986.....	40
22	Percent Increase in Total Housing Units and Percent Growth of Population in Housing Units: 1980-1986.....	41
23	Map of Regional Planning Districts.....	43
24	Planning Area/Community.....	44

Tables

1	Distribution of Sales Prices for Single-Family Homes: 1986.....	17
2	Distribution of Sales Prices for Condominiums:1986.....	18
3	Homeownership Rates by Regional Planning Area:1980, 1986.....	20
4	Affordability Indicators for Selected Communities.....	31
5	Number of Households by Regional Planning Area.....	37
6	Number of Assisted Housing Units.....	38

EXECUTIVE SUMMARY

An examination of the Commonwealth's housing picture was prompted in part by the 1987 request of the legislature. The General Court called upon the Executive Office of Communities and Development (EOCD) to conduct a five-year study of the supply and demand for housing. This request, supplemented by information from EOCD's ongoing monitoring of the state's housing stock, form the basis of this report.

Broadly, the legislation called for an analysis of such supply factors as the quantity of dwelling units produced in both the public and private sectors, along with the housing types represented and the number of rental units converted to condominiums. Demand factors were also to be analyzed, with particular attention to low income and elderly families, handicapped persons or families in which one or more members were handicapped and those with a variety of special needs.

This legislative mandate thus called for something more than merely an updating some of the elements of the 1980 census. It specified a comprehensive look at housing supply and demand in Massachusetts that would provide a policy context not previously available --one in which the fundamental issue of affordable housing could be brought into sharper focus.

Recognizing the magnitude of the task, EOCD prepared a request for proposals which Secretary Anthony sent to a number of the nation's leading housing research groups. They were asked to propose how to develop and analyze available supply and demand data to provide not only a housing inventory but crucial policy indicators that could be used to make sense of the supply and demand numbers. In late-1987 the competitive proposal process led to EOCD's selection of Abt Associates Inc., Cambridge, MA. The project team also drew upon the skills of several leading housing researchers at MIT to assure that the report represented the best analytic product available within the Commonwealth's funding constraints.

Both the methods used to obtain the data (most not previously available below the statewide level of aggregation) and the techniques used to analyze their significance are discussed later in this report. Information from EOCD's existing data series has been added to the report where warranted to update or clarify points made in the Abt Associates research.

This Executive Summary presents highlights of the Abt study findings submitted in July 1988. These results are based on 1986, the latest information available during the period of the research. Clearly, there has been a softening of the overall housing market since that time, especially in that sector characterized by condominiums; but comparable data are not yet in hand for the years 1987 and 1988.

Housing Supply

In the period 1980-86, the total number of dwelling units in the Commonwealth grew to 2,350,424 from 2,208,146, an increase of 142,278 units or 6.4 percent. Within this total, owner-occupied single-family housing increased by 7.1 percent and condominiums by 314 percent, while renter-occupied housing units decreased by 1 percent.

This growth in the housing stock varied widely across the state's planning areas, ranging from 21 percent in the Cape and Islands to 5 percent in the Metropolitan Planning Area. Subsidized housing, in both its property-based and tenant-based forms, amounts to 222,349 dwelling units, including both federally and state subsidized housing units.

Housing Demand

Statewide, the population grew more slowly than the expansion in the housing stock. The total rose to 5,831,920 from 5,737,037, an increase of 94,883 or about 1.6 percent. The average household size, as well as the number of adults per households, declined slightly between 1980 and 1986. These trends should help ease demand; however, they are not a sufficient basis for concluding that overcrowding has become somewhat less of a problem in the Commonwealth than at the time of the 1980 Census.

Housing Prices

The statewide median price for single-family homes stood at \$123,000 in 1986, while the median price recorded for condominiums was \$100,000. These same measures vary widely for the state's planning districts, from a high of \$167,500 in the Metro and Merrimack areas to a low of \$67,500 in the Franklin area.

Housing Affordability

The statewide affordability "gap" between what the median-income family can afford to pay and the actual median price of housing is a crucial policy issue. And in the first half of the 1980s, it was substantial. For single-family homes, the gap was about \$43,000, while for condominiums the affordability gap was about half as much, or as \$20,000.

In some of the state's planning areas, the gap was even wider: in both the Metro and Merrimack areas, it was about \$80,000 for all households and nearly \$50,000 in the Cape and Islands. As the affordability gap is a direct function of housing prices, it is likely that these gaps have widened still further since 1986.

Even for the condominium form of ownership, generally thought to be less costly than single-family ownership, only 43 percent of all households and 34 percent of those who rented could afford the median priced condo.

These data speak for themselves as to the degree of housing need that remains to be met in the Commonwealth. It is clearly quite

large. And yet, the glass is also half full: the same data, looked at another way, convey a picture of substantial progress. For example, EOCD's data on production of subsidized dwelling units show that between 1980 and 1986, the state entered into contracts for the production of approximately 8,100 dwelling units. Contracts for an additional 1,300 units have been signed since. Considering all state and federal production and rental assistance programs, there are a total of 222,349 subsidized dwelling units in the state.

The level of need for subsidized dwelling units identified by EOCD in 1980 was 376,517 units. Current figures suggest that about 59 percent of the 1980 need had been met by the end of 1988.

This report presents a range of data that describes key characteristics of both the private and the public housing stock at the state and planning area levels. It also provides uniform data not previously available in a centralized format on some of the key housing conditions found in the state's 351 cities and towns. Finally, there is complete documentation for all of the data used in preparing its findings in a format that will allow EOCD to do more detailed monitoring of the state's progress toward meeting its housing objectives in coming years.

INTRODUCTION

The availability of this report marks several important breakthroughs in understanding the dynamics of the housing market in the Commonwealth. Its major products are summarized as follows:

- o A compilation of housing demand, supply, and affordability measures for the state, the geographic regions served by the 13 regional planning agencies and the 351 cities and towns for the period 1980-86;
- o Survey results of condominium conversion activity in the state's communities as reported in a special data collection canvass of all local assessors;
- o A summary and graphical presentation of the major policy indicators for the state and planning areas; and
- o A computerized and fully documented data base that will enable EOCD to update this information for ongoing monitoring of these policy indicators.

The report thus expands available information on housing supply and demand in a number of important ways. Among them are the following:

- o Extending knowledge of state housing trends to the planning area and community level;
- o Providing detailed data on housing prices and income so that the distribution of affordability problems can be analyzed in addition to the central tendency;
- o Assembling in a single location all the different data bases on the private, public and subsidized housing stock; and
- o Structuring the new EOCD data base in a manner that can facilitate ongoing analysis of housing policy issues.

Like any research effort constrained by cost limitations, the study was primarily limited to using existing data sources. As a result there are several significant shortcomings:

- o Compatibility- The various existing data bases used in the study differ widely in geographic coverage, timing, purpose and data items included. The latest data available are typically from 1986.
- o Market Changes- The marketplace has changed in important ways since 1986. The strong runup in housing prices that marked the early-1980s, for example, has slowed in many places, and actually declined in others. Wherever possible, EOCD's most recent data have been included in an effort to make the report somewhat more current. But as recent condominium loan foreclosure actions by several mortgagees suggest, even this information may already be outdated in assessing conditions of the Massachusetts housing market today.

- o Planning Area Framework- Some of the key data are not available at the level of cities and towns. This shortcoming has led to an analytic emphasis on the state's planning areas rather than its communities.
- o Special Needs Groups- There are no reliable recent data available on the housing conditions faced by some of the special groups, such as households with members who are handicapped, the homeless, battered spouses, drug abusers and adolescents. Attempts to construct these data through discussions with advocacy groups failed to develop reliable information.
- o Special Data Categories- There are no recent data available in such areas as crowding, housing quality and rental vacancy rates for the state's population as a whole. This lack of information precludes addressing a range of topics about the quality, quantity and cost of affordable housing. Particularly elusive is a credible answer to the fundamental question: How well is the state doing today in meeting the overall housing needs of its citizens compared to, say, 1980?
- o Technical Issues- There are significant questions of accuracy that would be raised in any forward projection of housing supply and demand in view of the turbulent nature of the past five years. Even if benchmarks existed on housing quality, crowding and vacancy rates, what credibility could be claimed for a projection based upon, for example, the soaring condominium conversion rate of the last five years? Or the surprising decline in rental housing availability? There is evidence that both trends have recently been slowed, if not reversed; but it is insufficient for purposes of projection. In fact they may be more misleading than illuminating.

These are some of the data deficiencies that exist in the information on which this report is based. Many of them can be rectified by careful use of the information to be gathered on housing quality, crowding and vacancy in the forthcoming 1990 Census. Others can be overcome as the state adds to its own store of community level knowledge through the information generated by EOCD's various housing production and planning programs.

Nevertheless, the report's analysis of current housing supply and affordability is well suited to comparing housing affordability indicators in one planning area or community with those found in others across the state. Previously unobtainable in any meaningful format, these cross-community comparisons will be increasingly available to help focus the Commonwealth's housing resources where the affordability issue is most paramount.

The Abt report is contained in three volumes. Volume I contains a summary of key housing inventory and policy indicators for the state's planning areas, supplemented with relevant data from EOCD's own housing monitoring activities. It is, for the most part, presented here. The planning areas and a list of the 351 cities and towns that make them up appear in Exhibits 23 and 24, respectively. Sample housing tables for the state as a whole, a planning area (Metropolitan), and a community (Boston) are found in Appendix I of Volume I.

Volume II contains the complete housing data tables for all of the Commonwealth's cities and towns. Volume III presents information on data base documentation and the update procedures used for monitoring the data. All three volumes are available from EOCD upon request.

HOUSING SUPPLY

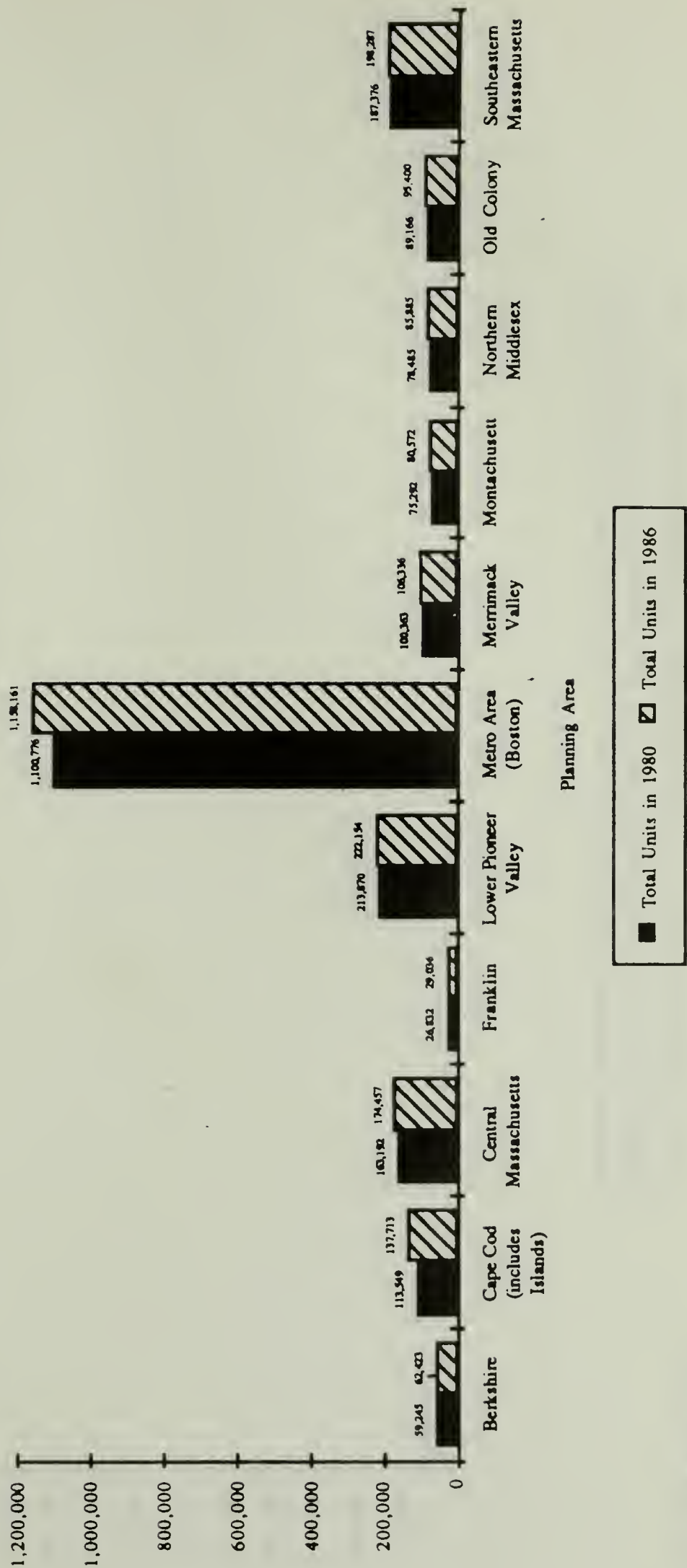
The total housing stock grew at a moderate rate, increasing by 6.4 percent between 1980 and 1986. Interesting differences occurred, however, across both types of units and areas of the state. Owner-occupied single-family homes increased by 7.1 percent. The renter-occupied stock, however, actually fell by 0.6 percent.

In contrast, the condominium stock grew tremendously between 1980 and 1986; the increase for the state overall was 314 percent. The major source of condominiums was through conversions of rental stock; 64,530 units were added through conversion, accounting for 69 percent of the total addition of 93,477 condominiums.

Exhibits 1 through 4 show the distribution of the housing stock across planning areas, while Exhibits 5 and 6 indicate the percent change during the period. Exhibit 7 shows the source of additions to the condominium stock.

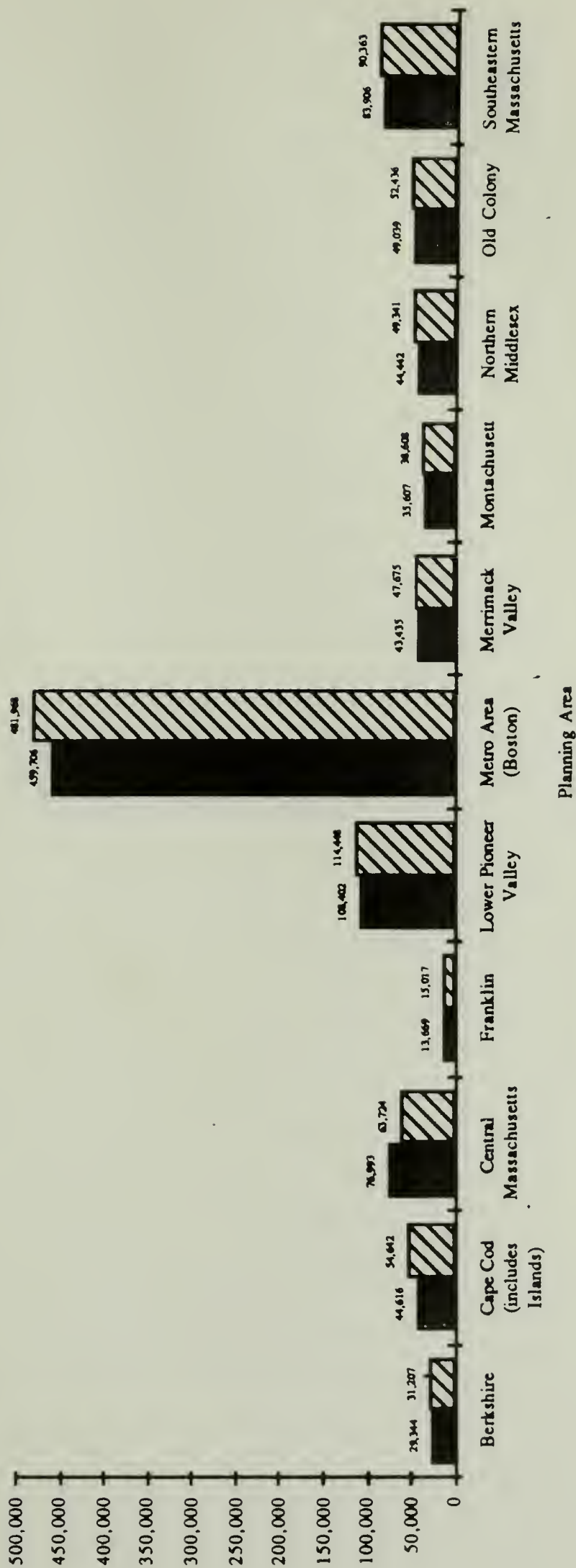
The variation in the rate of growth across the state's planning areas has been extensive, with the Cape and the Islands having an overall growth rate of 21 percent. This rate is three and one-half times the state average. Growth was next highest in Northern Middlesex, fueled by an 11 percent increase in single-family homes and a staggering increase (689 percent) in condominiums. On the other hand, growth in the Metro Area, both overall and for single-family homes, lagged behind the average, even though the sheer size of this planning region leads it to dominate state level trends.

Exhibit 1:
Total Units in 1980 and 1986,
by Planning Area



Source: 1980 housing stock from 1980 Census
1986 housing stock based on 1980 data, updated using
Local Assessment Survey, Building Permit Survey (Census)
Parcel Count Data (Department of Revenue)

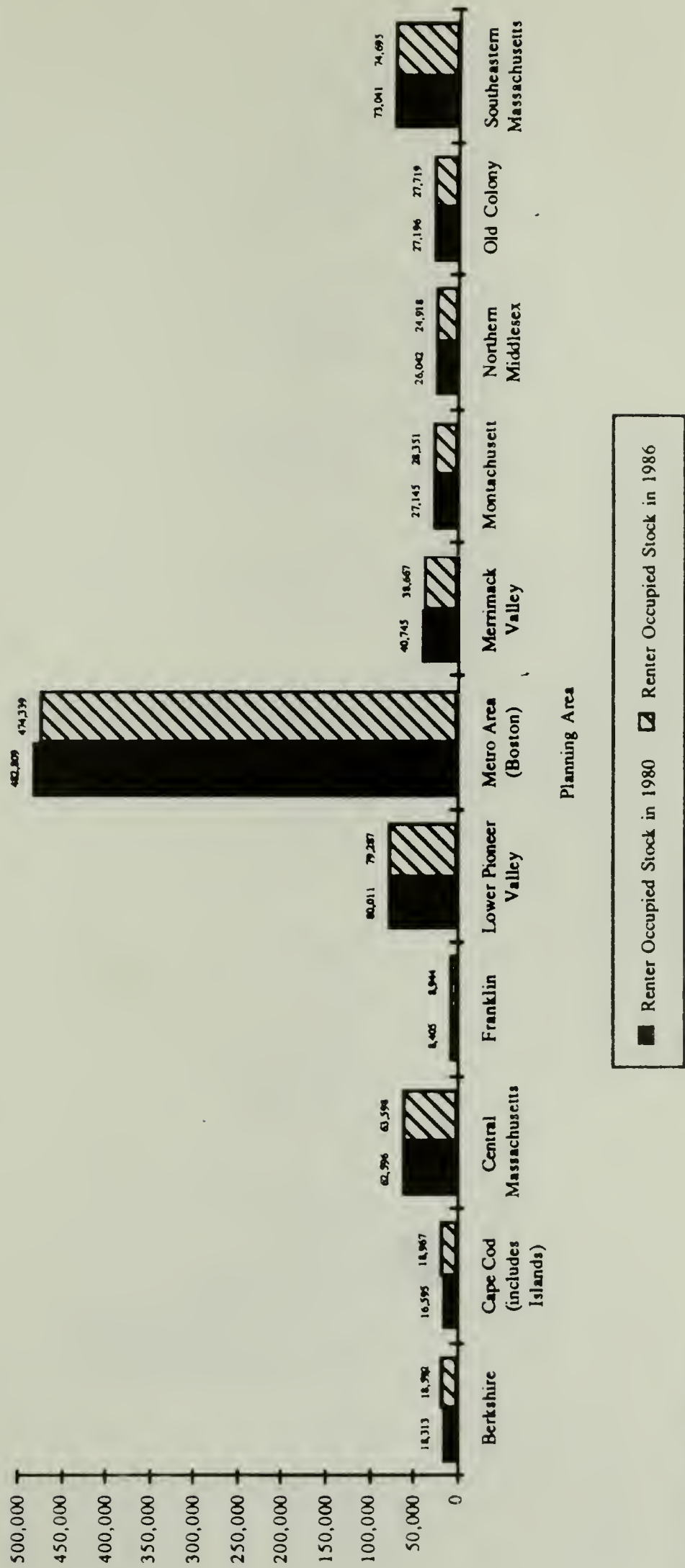
Exhibit 2:
Owner Occupied Single Family Homes,
1980 and 1986



Owner Occupied Single Family Homes in 1980
 Owner Occupied Single Family Homes in 1986

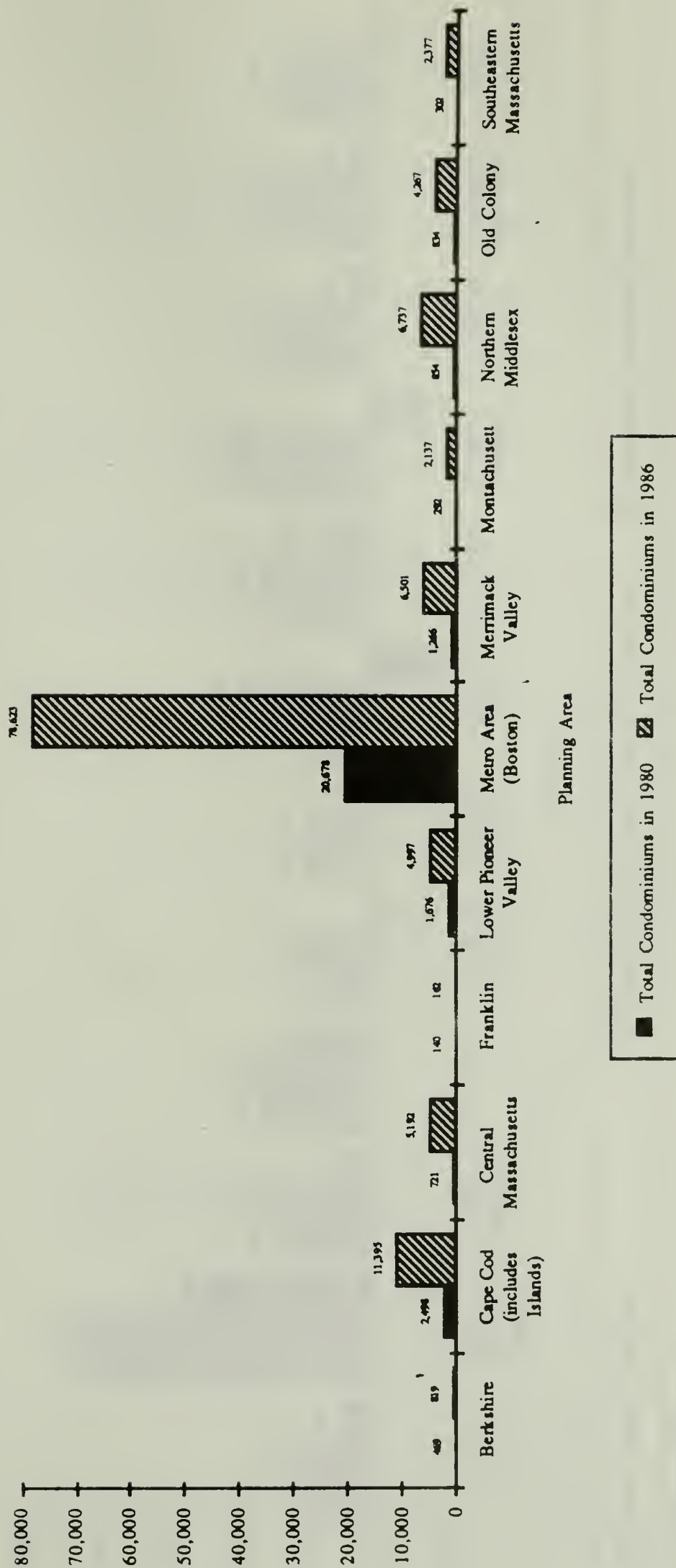
Source: 1980 housing stock from 1980 Census; 1986 housing stock based on 1980 data, updated using Local American Survey, Building Permit Survey (Census), and Parcel Census Data (Dept. of Revenue).

Exhibit 3:
Renter Occupied Units in 1980 and 1986,
by Planning Area



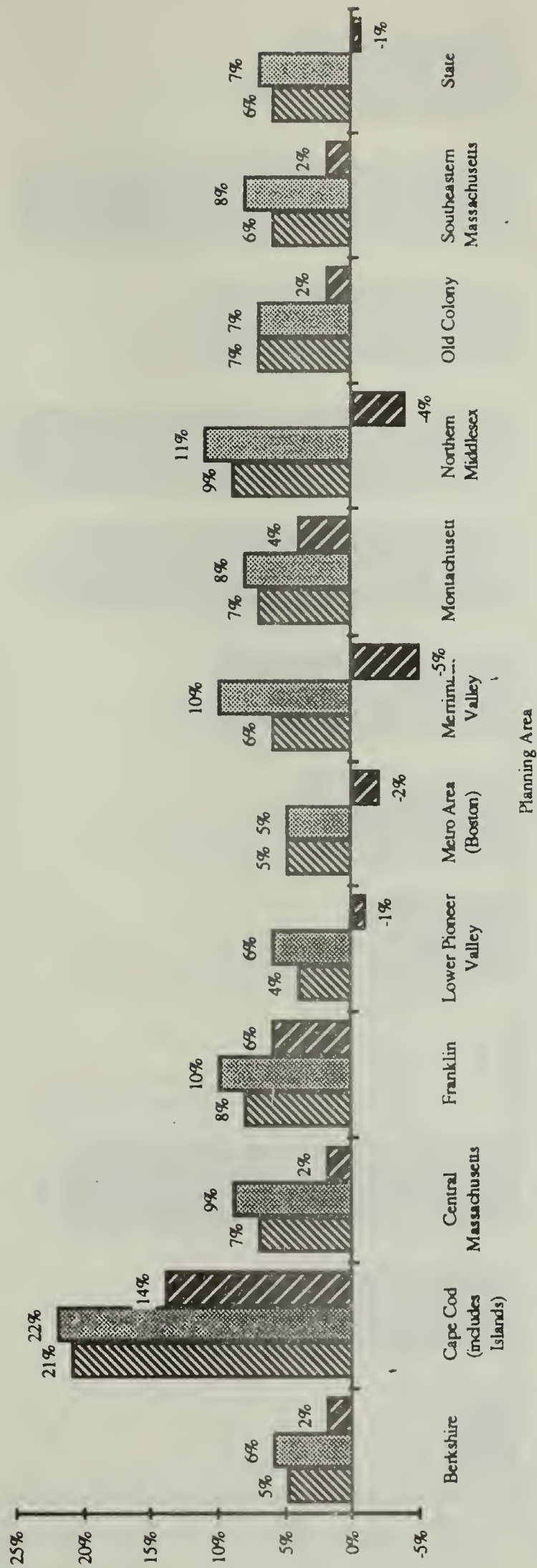
Sources: 1980 housing stock from 1980 Census
1986 housing stock based on 1980 data, updated in
Local American Survey, Building Permit Survey
(Census), Part of Census Data (Department of Revenue)

Exhibit 4:
Condominium Stock,
1980 and 1986



Source: 1980 housing stock from 1980 Census
1986 housing stock based on 1980 data
updated using Local Assessment Survey
Building Permit Survey (Census) and
Parcel Count Data (Dept. of Revenue)

Exhibit 5:
Percent Change in Total Units,
Rental, and Owner Occupied Single Family,
1980 to 1986



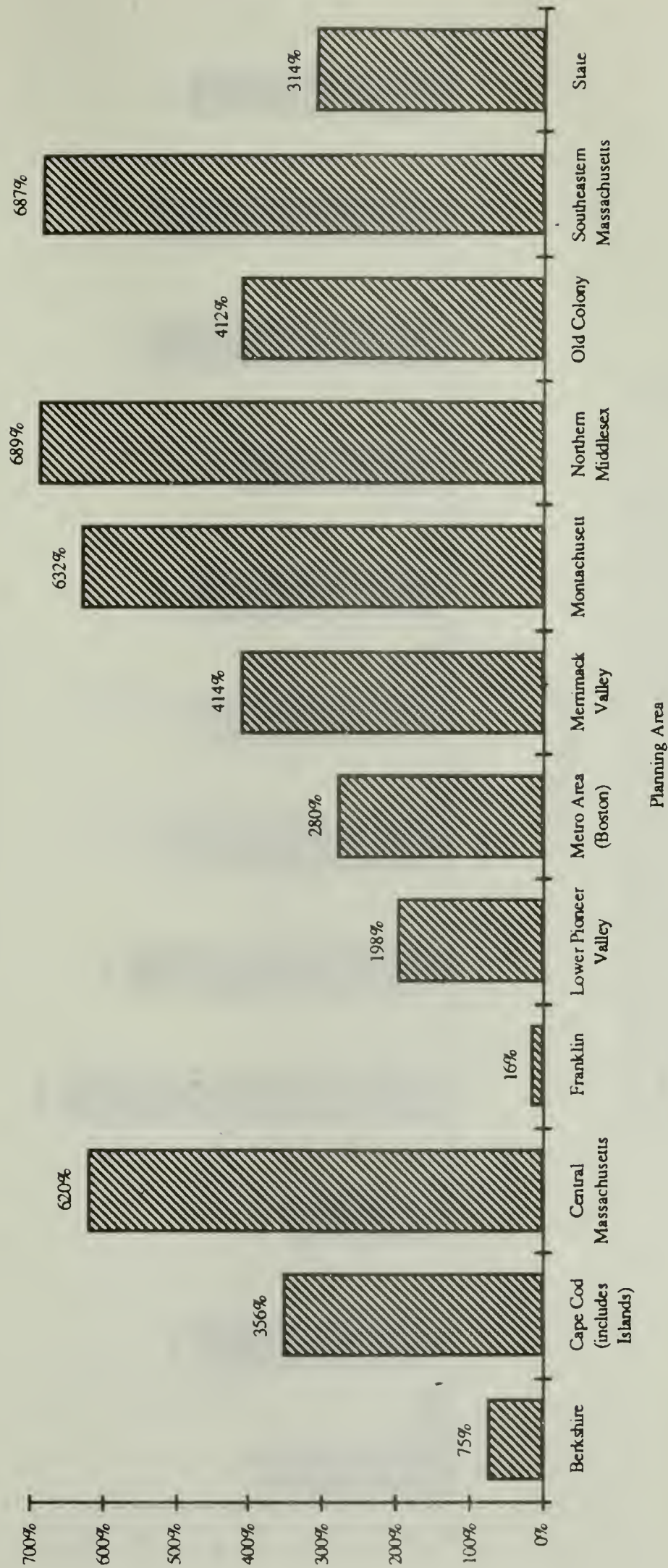
■ Percent Change in Total Units

■ Percent Change in Owner Occupied Single Family Stock

■ Percent Change in Occupied Rental Stock

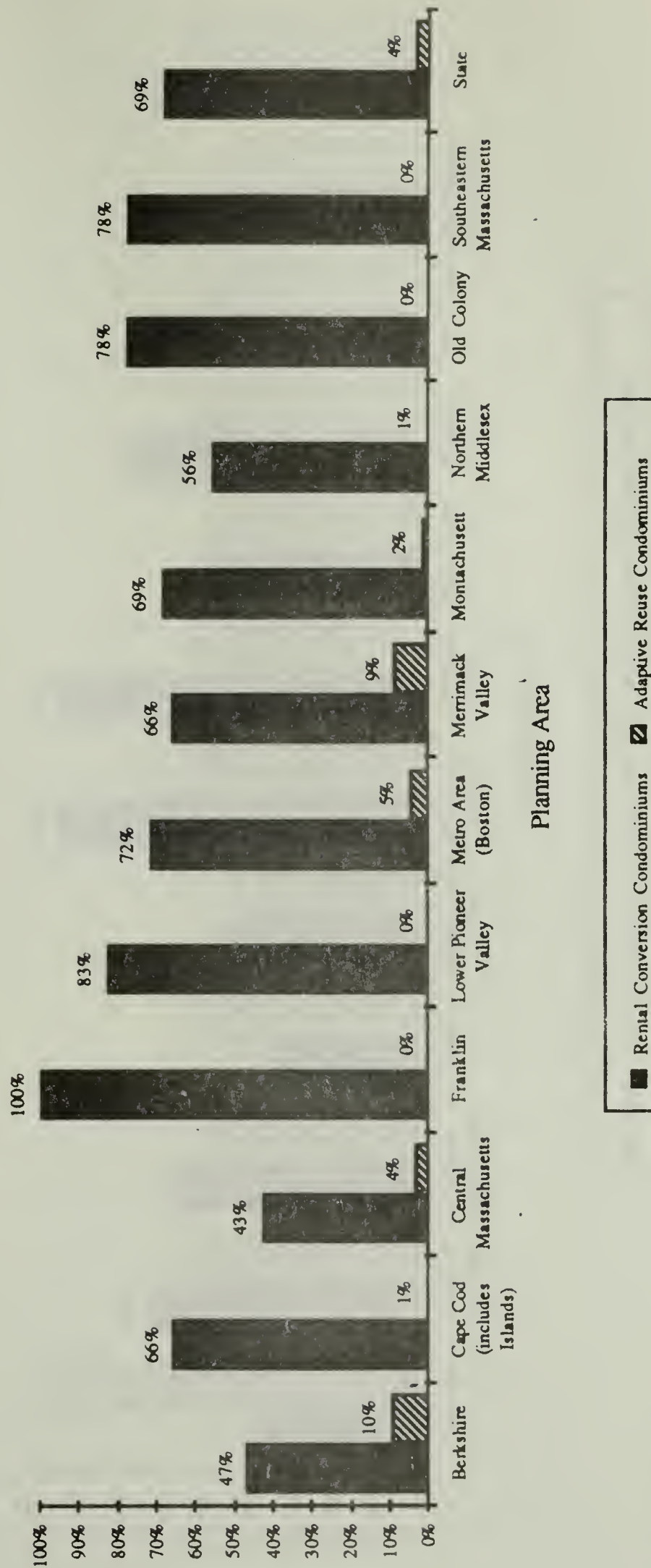
Source: 1980 housing stock (1980 Census);
1986 housing stock from 1980 data
updated using Local American Survey,
Building Permit Survey (Census), and
Permit Census Data (Dept. of Revenue)

Exhibit 6:
Percent Change in Condominium Stock,
1980 to 1986



Source: 1980 housing stock from 1980 Census
1986 housing stock based on 1980 data
updated using Local Assessment Survey,
Building Permit Survey (Census) and
Parcel Count Data (Dept. of Revenue)

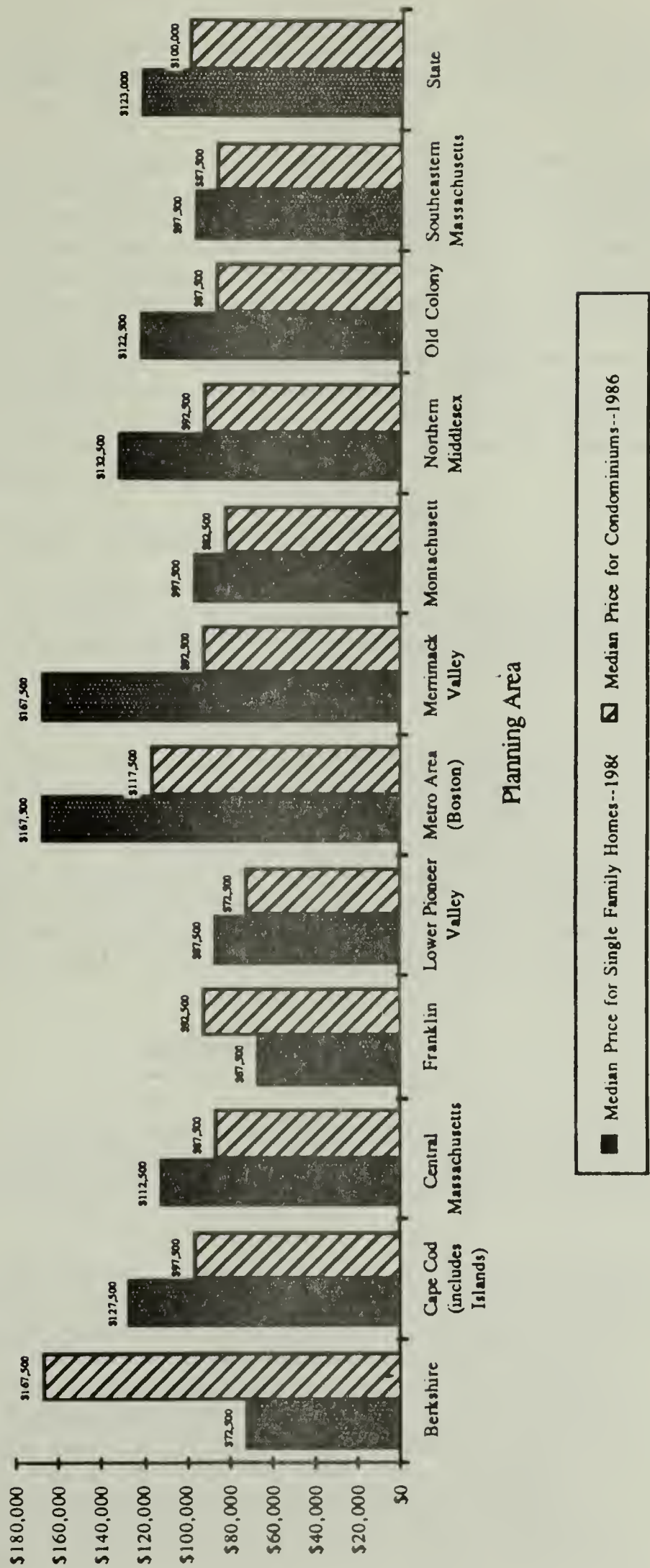
Exhibit 7:
Percent of Additions to Condominium Stock
through Rental Conversion and
Adaptive Reuse



■ Rental Conversion Condominiums ▨ Adaptive Reuse Condominiums

Source: 1980 housing stock from 1980 Census
1984 stock based on 1980 data
updated using Local Assessment Survey

Exhibit 8:
Median Price for
Single Family Homes and
Condominiums--1986



Source: Compiled data from County Home Data of Shelburne, VT

Condominiums

The condominium stock is now sizeable in the Metro Area, the Cape, Northern Middlesex, and Merrimack. Rates of increase are also notable everywhere except the Franklin Area.

As seen in Exhibit 4, the major share of the condominium stock is in the Metro Area, which had close to 80,000 condominium units in 1986. Nearly one-third of this stock is in the City of Boston (25,729 units in 1986). Conversion of the rental stock is taking place in these areas to a greater extent than the average for the state. Thus, 72 percent of the increase in the Metro Area's condominium stock was added through conversion, while 83 percent of the City of Boston's condominium stock growth was added in this manner. In contrast, while adaptive reuse is very prevalent in some communities, it accounted for only 5 percent of the Metro Area's and 4 percent of the state's growth in condominiums. New construction accounted for 27 percent of the increase in condominiums in the state and 23 percent in the Metro Area.

Owner-Occupied Single-Family and Renter-Occupied Stock

A great surge in the single-family stock took place on the Cape and the Islands, increasing by 22 percent during the first half of the decade. Elsewhere growth ranged from 11 percent in Northern Middlesex to a low of 5 percent in the Metro Area. Most areas ranged from 8 to 10 percent growth, however.

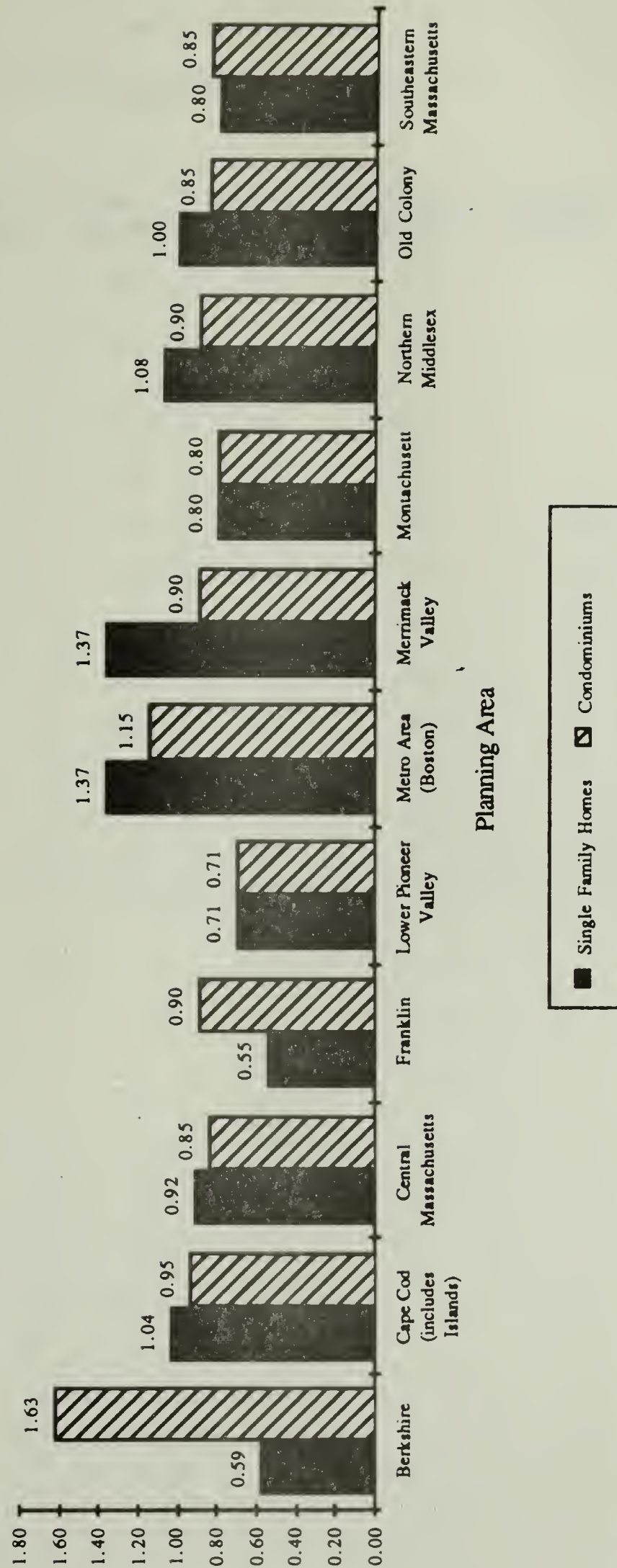
In contrast, the rental stock was completely stagnant. Four planning areas actually suffered declines, evidently occasioned by the conversion of rental units into condominiums: rental housing in Merrimack fell by 5 percent; in Northern Middlesex by 4 percent; Metro Area, 2 percent; and Lower Pioneer, 1 percent. The Cape, again, was the exception; however, even with 14 percent growth on the Cape, the Metro Area so dominates the rental stock that the rental stock decline there led to an overall decline for the state.

HOUSING PRICES

Housing prices are indeed high in Massachusetts. The nationwide median price for single-family homes for 1986 was \$93,700, which is lower than all planning areas except Berkshire, Franklin and Lower Pioneer.

Tremendous variation exists across planning areas in prices for single-family homes and condominiums. (Exhibit 8 displays 1986 median prices, and Tables 1 and 2 show the distribution of these prices.) For the state overall, the median single-family housing price in 1986 was \$123,000 and the median condominium price was \$100,000. (Mean prices are much higher: \$172,787 and \$125,663, respectively.) Prices for single-family homes are highest in the Metro Area (the median is \$167,500 while mean is \$237,188) and lowest in the Franklin Area (the median is \$67,500 and the mean is \$79,721). Single-family prices are also high in Merrimack Valley, Northern Middlesex, and the Cape.

Exhibit 9:
1986 Planning Area Median Price
Relative to State Median Price--
Single Family Homes
and Condominiums



Source: Compiled data from County House Data of Shelburne, VT

TABLE 1

DISTRIBUTION OF SALES PRICES FOR SINGLE-FAMILY HOMES: 1986
(PERCENT)

Planning Area	0 - \$37,999	\$38,000 - \$66,999	\$67,000 - \$105,999	\$106,000 - \$132,999	\$133,000 - \$199,999	\$200,000 - \$265,999	\$266,000+
Berkshire	24.6	20.5	28.2	8.2	11.3	3.6	3.5
Cape Cod (includes Islands)	5.9	10.6	21.4	17.6	24.2	8.0	12.4
Central Massachusetts	13.5	10.1	24.3	17.9	22.0	6.3	6.0
Franklin	26.6	21.3	32.8	8.3	6.8	1.9	2.4
Lower Pioneer Valley	16.9	15.5	34.2	13.9	12.2	3.0	4.4
Metro Area (Boston)	7.3	6.6	13.0	17.8	13.0	20.5	21.9
Merrimack Valley	4.4	6.0	17.3	17.2	31.6	11.4	12.1
Montachusett	14.7	12.7	30.1	16.4	15.9	4.5	5.8
Northern Middlesex	4.4	6.1	16.1	23.5	36.9	7.6	5.5
Old Colony	5.5	6.0	19.4	28.0	28.5	6.2	6.4
Southeastern Massachusetts	10.7	13.0	31.6	18.6	18.6	3.5	4.0

TABLE 2

DISTRIBUTION OF SALES PRICES FOR CONDOMINIUMS: 1986
(PERCENT)

Planning Area	0 - \$37,999	\$38,000 - \$66,999	\$67,000 - \$105,999	\$106,000 - \$132,999	\$133,000 - \$199,999	\$200,000 - \$265,999	\$266,000+
Berkshire	0.7	3.4	29.5	15.4	26.9	15.4	8.7
Cape Cod (includes Islands)	4.4	14.4	39.4	20.3	15.9	3.1	2.6
Central Massachusetts	0.7	18.4	51.9	18.0	9.3	1.0	0.7
Franklin	1.9	4.6	75.0	15.7	2.8	0.0	0.0
Lower Pioneer Valley	1.6	43.1	39.3	6.9	7.1	0.5	1.6
Metro Area (Boston)	2.1	7.2	34.1	19.5	26.6	5.9	4.7
Merrimack Valley	0.6	7.3	63.2	19.9	6.1	0.9	2.1
Montachusett	0.8	34.3	44.8	15.2	4.4	0.1	0.4
Northern Middlesex	1.2	9.7	56.9	18.7	12.3	0.3	0.9
Old Colony	0.7	12.8	54.2	19.1	9.2	2.2	1.8
Southeastern Massachusetts	0.4	14.0	64.0	15.4	3.4	0.7	2.1

For ease of comparison of areas across the state, Exhibit 9 shows the ratio of the planning area median to the state median. Thus, the Metro Area single-family median price is 37 percent higher than the state median, while the median in Lower Pioneer Valley is 45 percent lower.

Table 1 provides further evidence on the extent of price variation across the state. In the Metro Area, Merrimack, and Northern Middlesex, over 50 percent of the single-family homes sold for over \$133,000. Indeed, in the Metro Area, 22 percent sold for over \$266,000. In contrast, the majority of homes in the Berkshires, Franklin, Lower Pioneer, Southeastern, and Montachusett sold for less than \$106,000.

The distribution for condominium prices is somewhat different. The Berkshire Area has by far the highest prices (the median is \$138,940 and the mean is \$150,237). Metro Area condominium prices are also high (the median is \$115,900 and the mean is \$138,729). Table 2 shows the distribution of condominium prices by price category. Nearly all the very high priced units are in the Berkshires (51 percent priced over \$133,000) or the Metro Area (37 percent priced over \$133,000). In contrast, more moderately priced units make up a large portion of the condominiums sold in Montachusett, Lower Pioneer, and Central Massachusetts.

AFFORDABILITY

One of the most disturbing trends in the national housing picture during the 1980s has been the reversal of the positive trend in the attainment of homeownership among American households. In 1980, for example, 65.6 percent of all U.S. households owned their own homes, up from 64.4 percent in 1973. By 1987, however, 64.0 percent were homeowners. A close look at the income distribution of households reveals an increase in ownership for households with incomes of \$50,000 and more, but a sharp decrease for those of low and moderate income. Homeownership is clearly slipping out of the grasp--and the dreams--of many American families.

Homeownership itself might be thought to be holding its own in the state, as suggested by Table 3. But these data are more than a little misleading. Homeownership affordability in Massachusetts has reached a critical stage for many households. The real question, masked to some extent by homeownership rates, is: What is the magnitude of the affordability problem for those who live in the Commonwealth?

Until housing costs are viewed in connection with households' ability to pay, one cannot address the question of the extent to which housing costs are "too high." Characterization of the affordability problem is, as always, complex and dependent on both the level and distribution of income and house prices. The poorest communities do not always face the worst affordability problems nor are the more affluent necessarily better off with regard to affordability. Unfortunately, many aspects

TABLE 3: Homeownership Rates By Regional Planning Area
1980, 1986

Regions	1980	1986	% Points Change 1980-86
Berkshire	65.05	66.19	1.14
Cape Cod & Islands	74.30	75.81	1.51
Central Mass.	59.36	61.38	2.02
Franklin	65.31	65.84	0.53
Lower Pioneer Valley	60.45	62.29	1.84
Metropolitan Area	53.58	56.70	3.12
Merrimack	55.96	60.65	4.69
Montachusett	61.05	61.93	0.88
Northern Middlesex	65.27	69.67	4.40
Old Colony	66.92	68.45	1.53
Southeastern Mass.	58.43	59.82	1.39
State	57.55	60.25	2.70

of the affordability issue cannot be considered here because of lack of data. These include the quality of the dwelling units; the role of assets in the ability to purchase homes; doubling up and crowding; slowdown in household formation; and the simple ability-to-pay of very low income people. Also, the available rent data cannot provide an overall assessment of rent burden. Nevertheless, all available information on price and income distributions has been utilized and several measures of affordability have been developed:

1. The percent of households who can afford a median priced single-family home* (all households and renter households, Exhibit 10);
2. The percent of households who can afford a median priced condominium (all households and renter households, Exhibit 11);
3. The percent of single-family homes affordable by median income households (all households and renter households, Exhibit 12);
4. The percent of condominiums affordable by median income households (all households and renter households, Exhibit 13);

* For this computation the following assumptions were made: downpayment was 20 percent of house price (at the state level this was \$24,600 for a median priced single-family house and \$20,000 for a median priced condominium), property taxes averaged 2.0 percent of total price, hazard insurance averaged 0.4 percent of total price, and mortgage terms were 10.07 percent interest (constant) for a 30-year loan (based on the average 1986 contract interest rate as reported by the Federal Home Loan Bank Board Mortgage Interest Rate Survey for Massachusetts.)

5. The dollar affordability gap between the price median income households can afford to buy and the median price of a single-family home and condominium (Exhibits 14 and 15); and
6. The rent burden (Exhibits 16 and 17).

Single-Family Homes

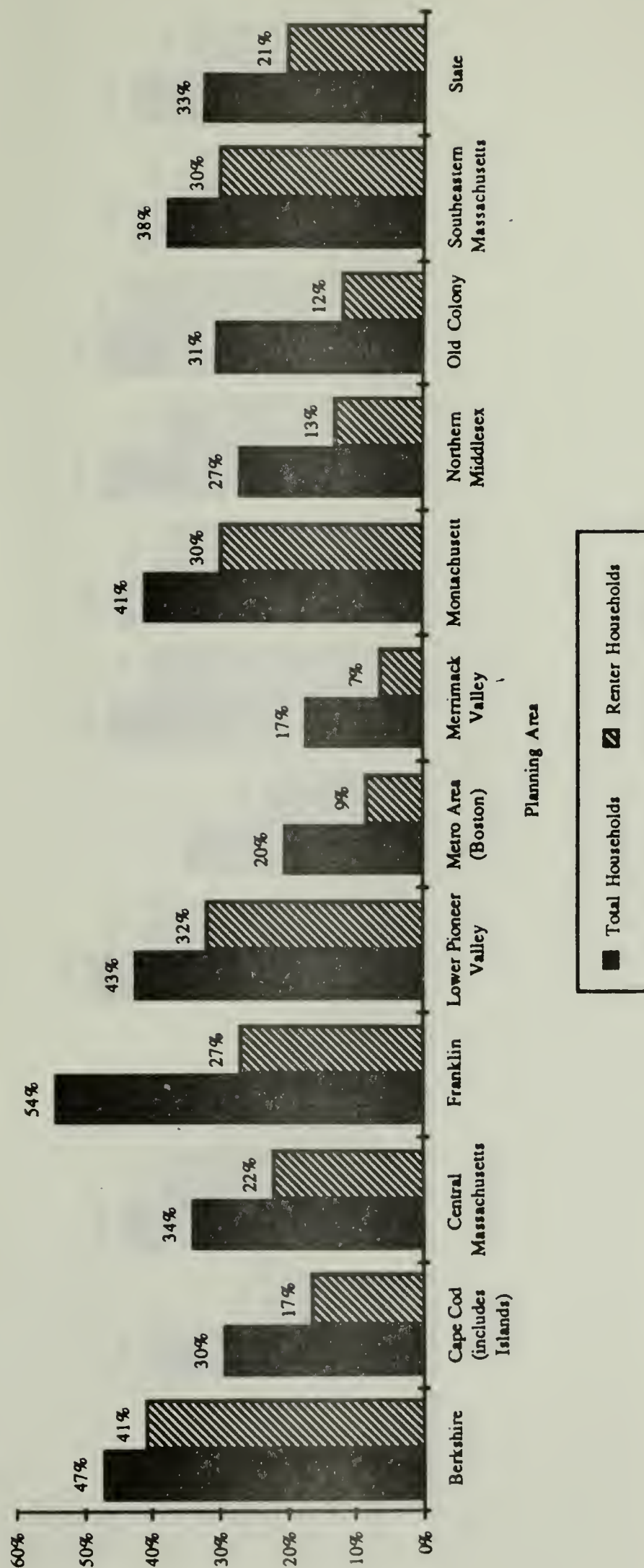
The least "affluent" planning areas in the state are the Berkshires, Lower Pioneer Valley, and Southeastern. Median income in these areas ranged from approximately \$25,000 to \$28,000 in 1986 as compared with \$35,000 for Northern Middlesex, (the highest in the state,) and \$31,000 for the state. In addition, nearly one-tenth of the households in many of the poorer areas were below the poverty level in 1980 (see Exhibit 18). Where housing prices are relatively low, however, problems of affordability may be less severe than for other areas in the state. Thus, while "affordability" is clearly a problem throughout Massachusetts, it is less of a problem in Franklin, the Berkshires, Lower Pioneer, and Montachusett than other planning areas. In contrast, Merrimack and the Metro Area (which had the second and third highest median incomes in the state in 1986) also faced the most severe problems of affordability, at least as measured here.

In the Metro Area, the median income is about \$32,800 and prices are high. In fact, only 20 percent of all households (including home-owners) and 9 percent of renter households could afford the median priced single-family home in 1986. Merrimack, with the second highest median income (about \$34,000), also faces an affordability problem stemming from high prices. Only 17 percent of all households and 7 percent of renter households can afford a single-family home. Northern Middlesex, Cape Cod, and Old Colony have similar situations. Merrimack and the Metro Area stand alone, however, in order of magnitude.

On the other hand, housing in the less affluent communities is more "affordable." The Franklin Planning Area had the lowest median housing price (\$67,500), and 54 percent of all households and 27 percent of renters could afford the median single-family house. Housing in Lower Pioneer and the Berkshires was also relatively affordable. While these are two of the poorest areas, low-income people are likely to be poorly housed and/or have high payment burdens. The Southeast and Montachusett also represent low- to moderate-income areas where twice as many households can afford the median priced home in their planning area as in the Metro Area or Merrimack.

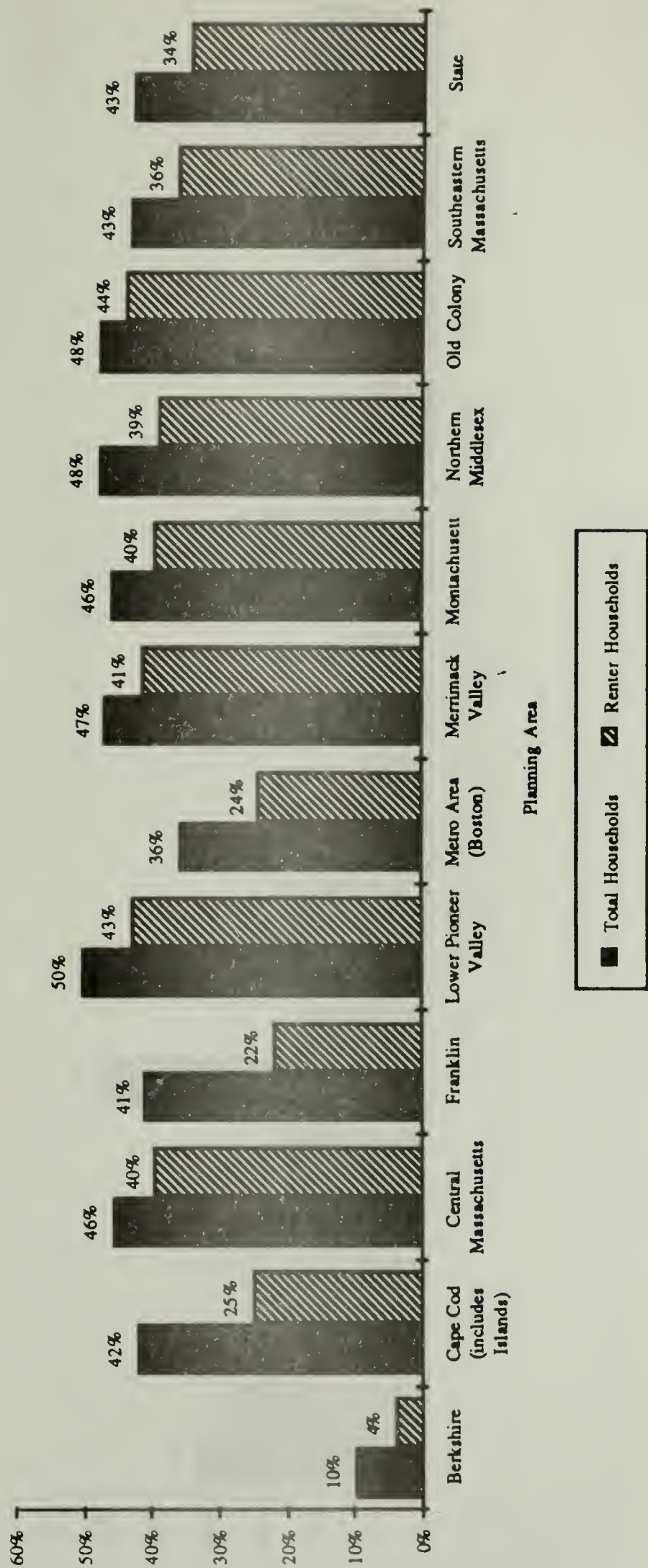
Another way of looking at the affordability issue is to determine the percent of single-family homes sold in 1986 that the median-income household could afford to purchase. Here, differences in the distribution of prices changes the ranking somewhat. The Metro Area now has the least affordable housing; the median-income family can afford to buy only 14 percent of the

Exhibit 10:
 Percentage of All Households and Renter Households
 Who Can Afford a Median Priced Single Family Home
 in Their Planning Area



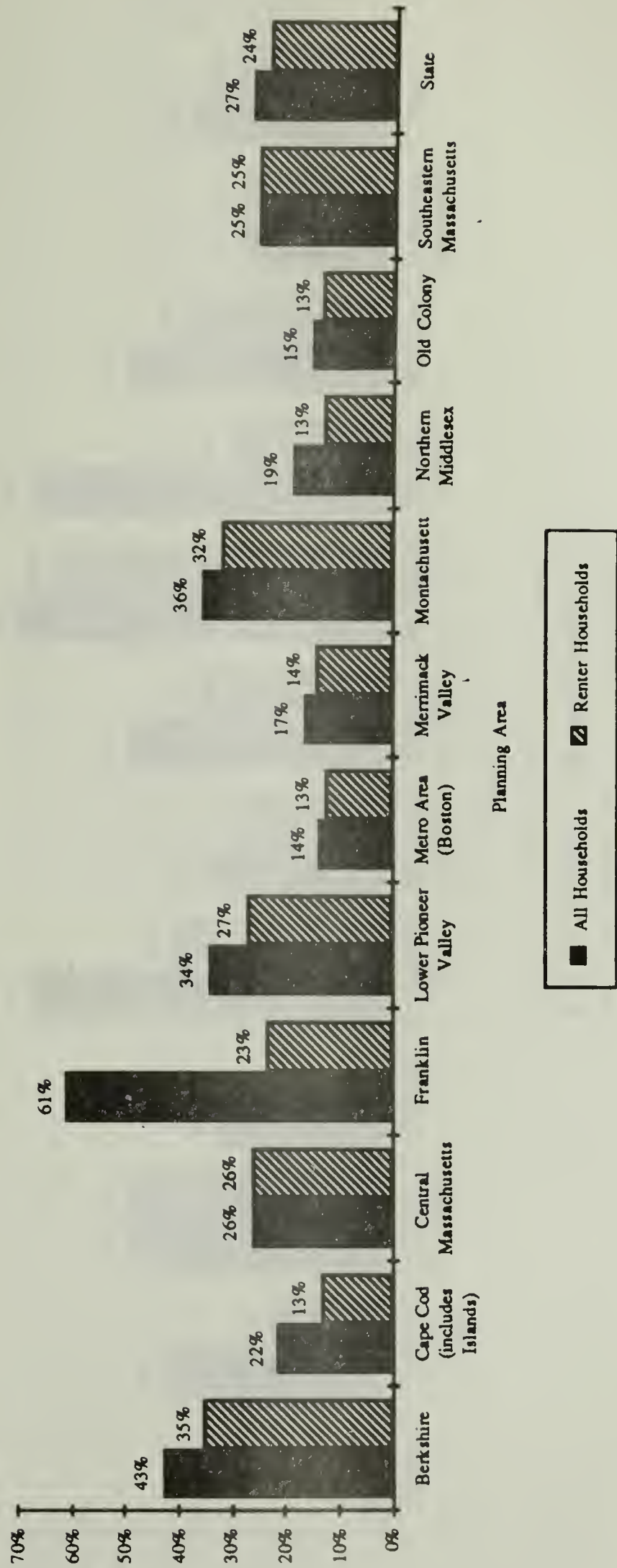
Source: House Prices computed using data from County House Data
 Income computed using sample data from other state agencies

Exhibit 11:
 Percentage of All Households and Renter Households
 Who Can Afford a Median Priced Condominium
 in Their Planning Area



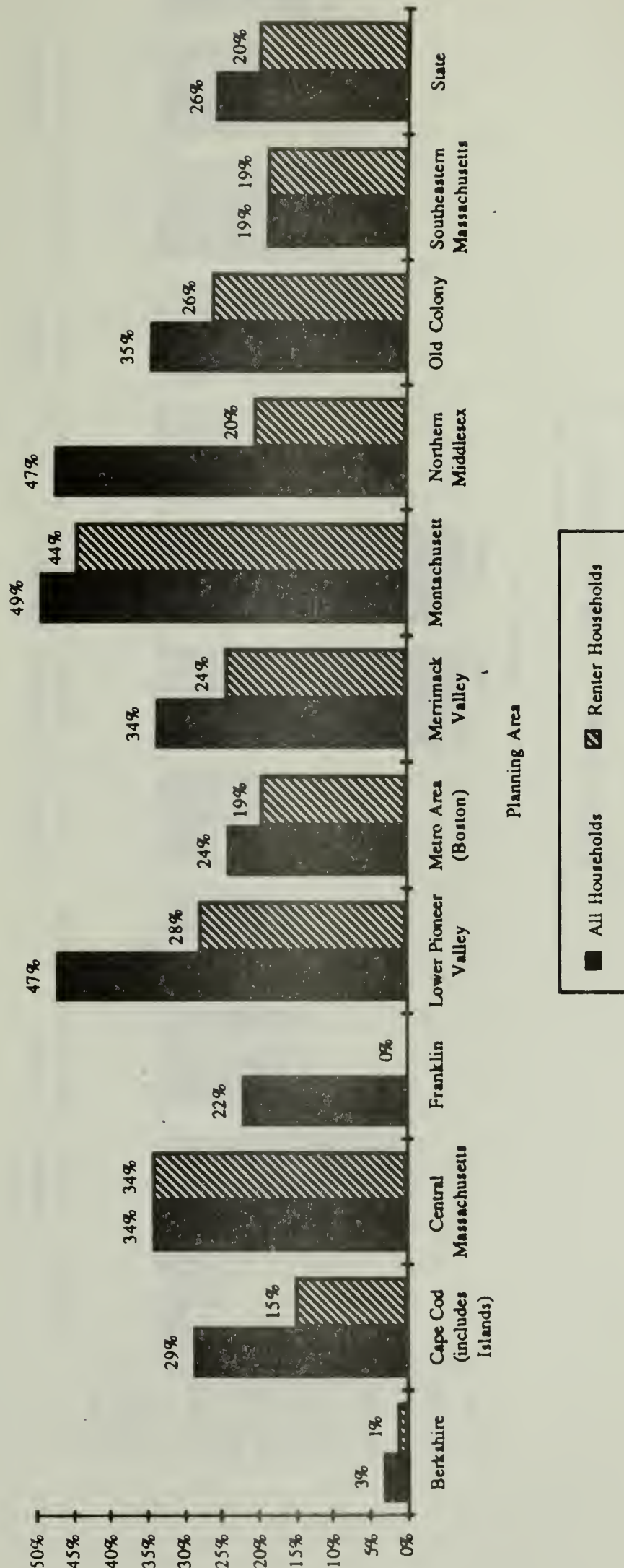
Source: Condominium prices computed using data from County Home Data; income computed using a sample data from other state agencies.

Exhibit 12:
 Percentage of Single Family Homes
 Median Income Renter Households
 Can Afford to Buy



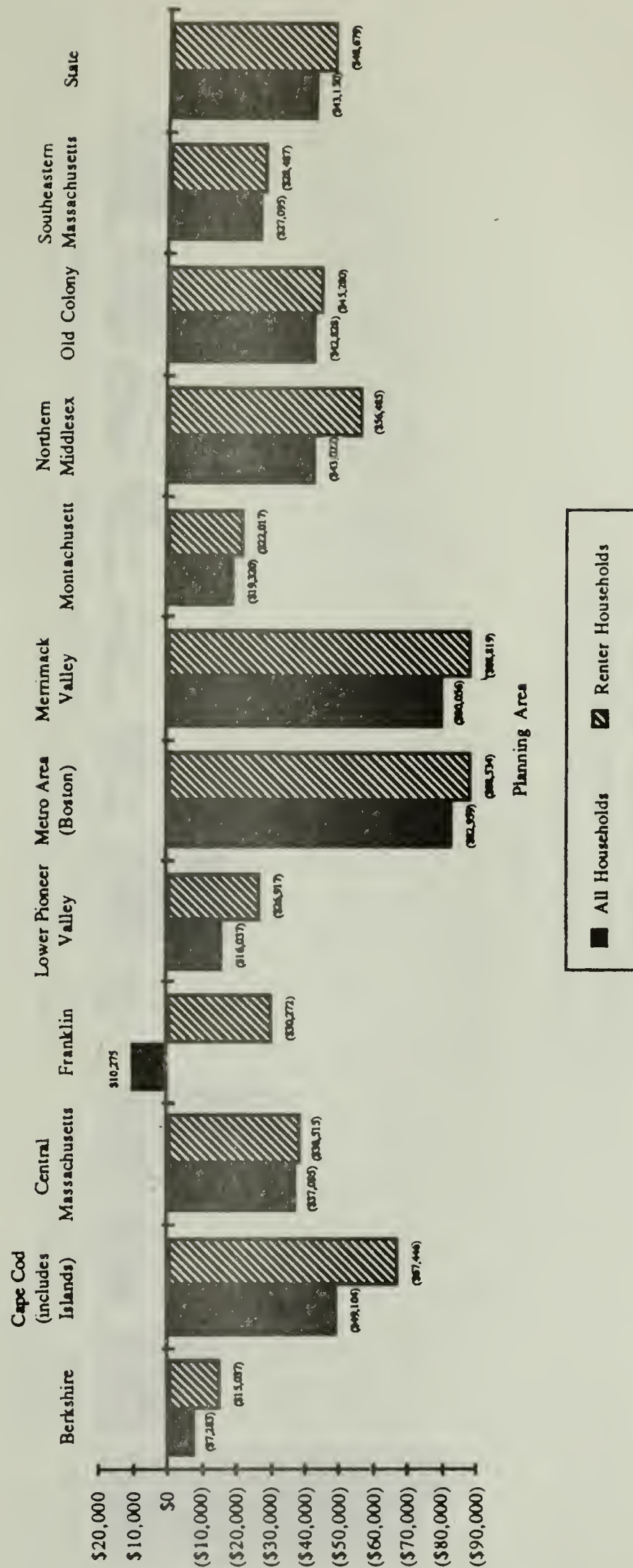
Source: House prices computed using data from County House Data
 Income computed using sample data from other state agency

Exhibit 13:
 Percentage of Condominiums
 Median Income Households and
 Median Income Renter Households
 Can Afford to Buy



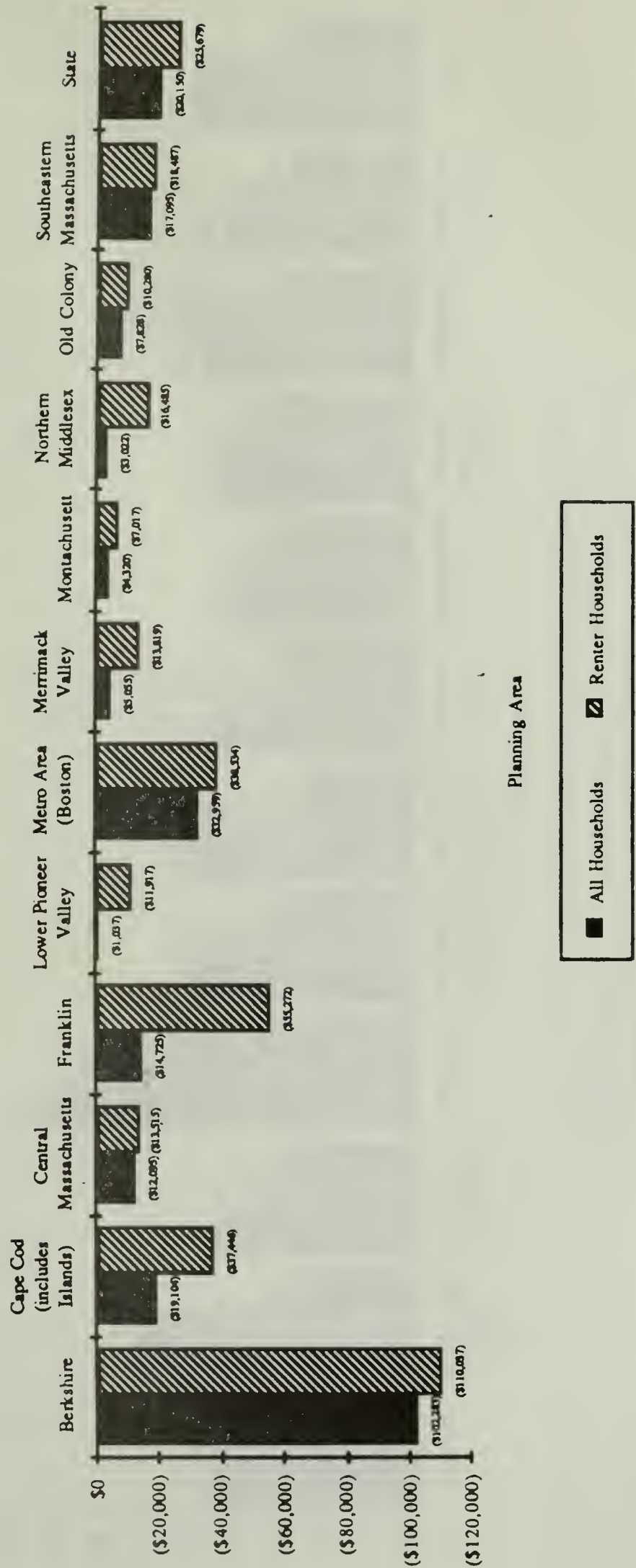
Source: Condominium prices computed using data from County Home Data
 Income, computed using sample data from other state agencies

Exhibit 14:
Affordability Gap Between Housing Price
Median Income Households
Can Afford to Pay and the Median Price
of a Single Family Home



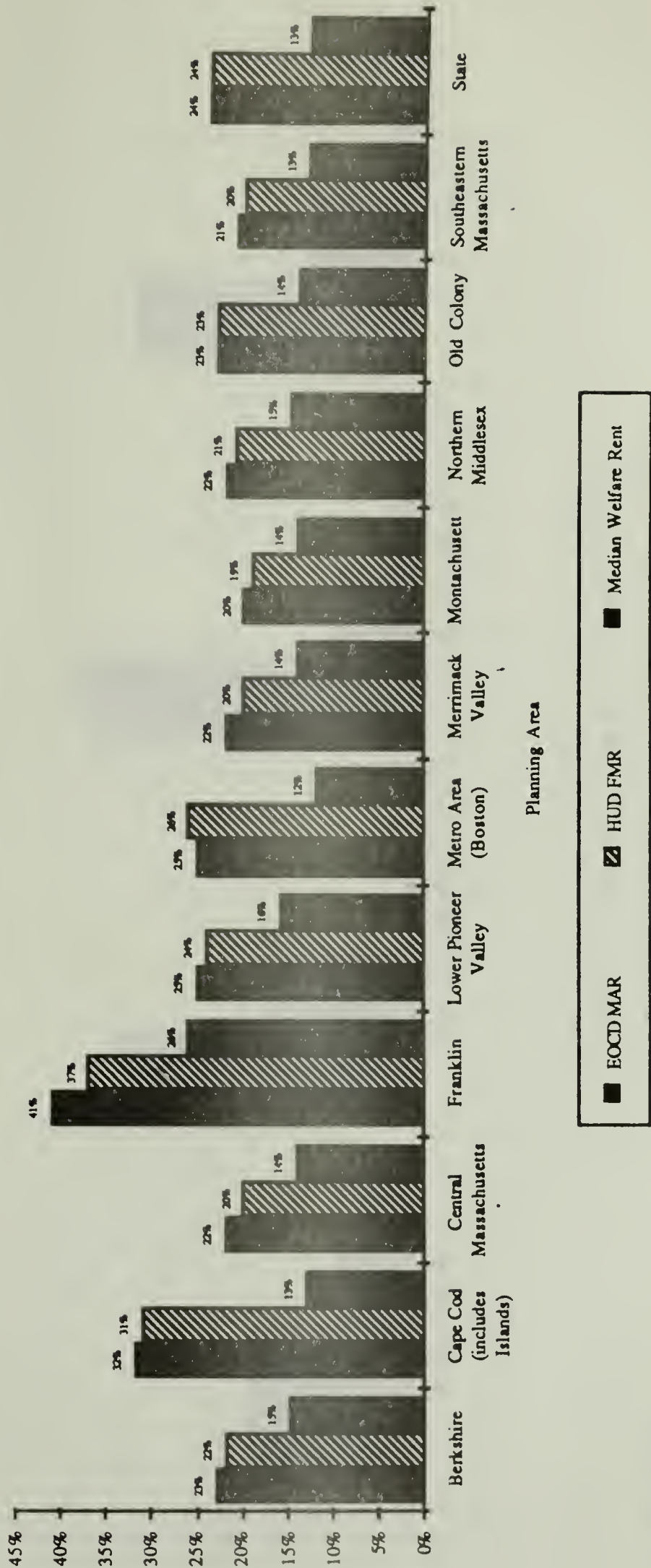
Source: House price computed using data from County Home Data; locations computed using sample data from other state agency

Exhibit 15:
Affordability Gap Between Housing Price
Median Income Households
Can Afford to Pay and the Median Price
of a Condominium



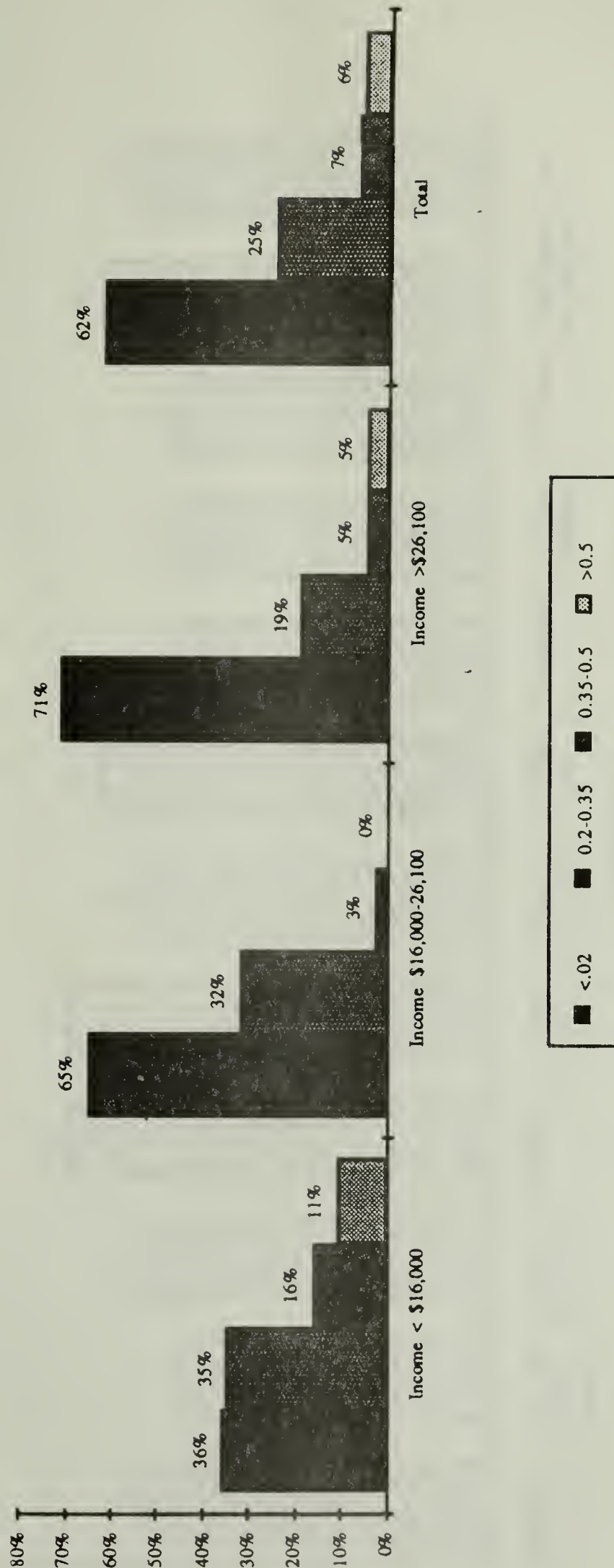
Source: Condominium Prices computed using data from County Home Data
Locations, computed using sample data from other state agencies

Exhibit 16:
 Rental Affordability Indicators:
 Rent Level as a Percent
 of Adjusted Median Taxable Income



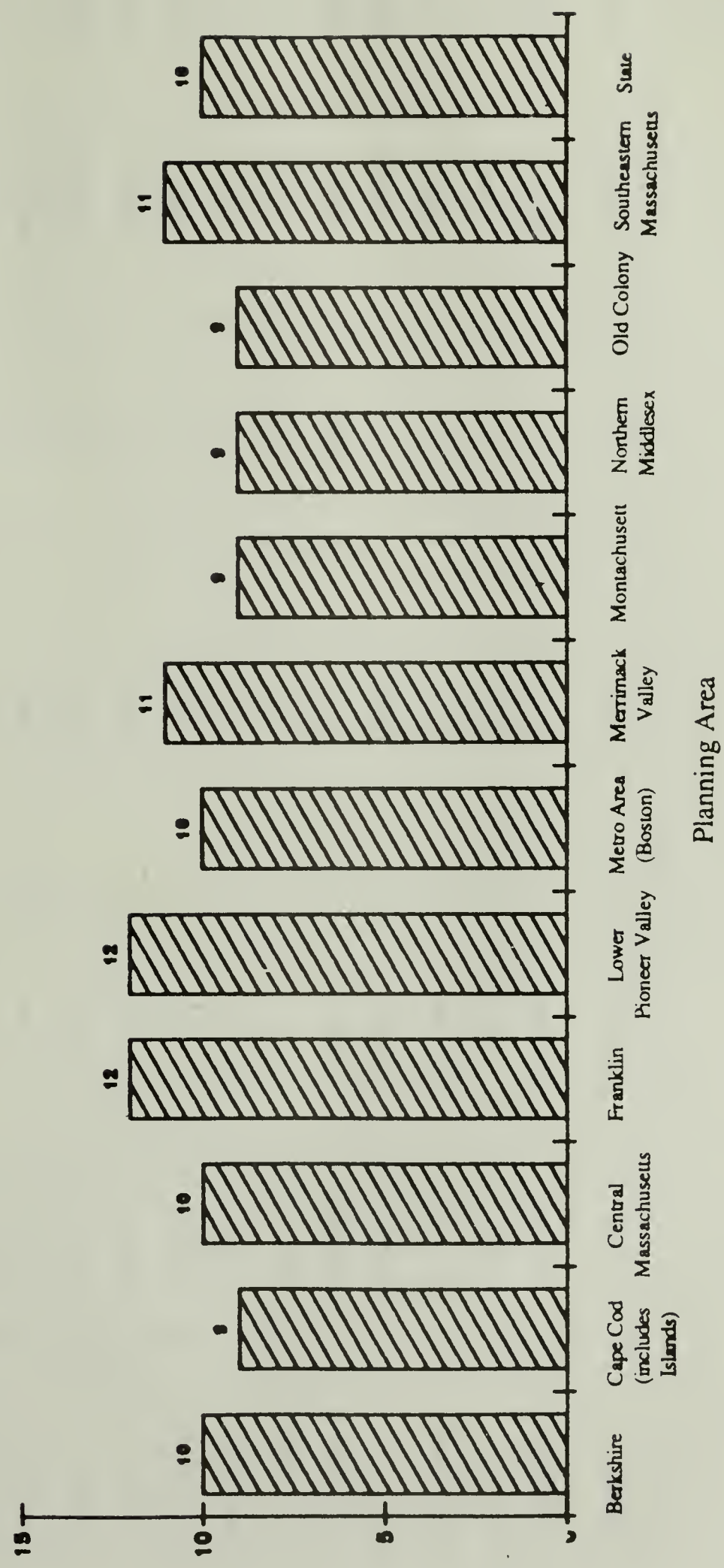
*Source: 2 Bedroom MAR from EOCD
 2 Bedroom FMR from HUD
 Median Welfare Rent, Dept. of Welfare
 Income estimated using sample data EO
 obtained from other state agencies

Exhibit 17:
Statewide Distribution of
Rent/Income Ratios
by 1986 Income Category
(unadjusted taxable income data; net rent)



Source: Data received by EOCD from other state agencies

Exhibit 18:
Percent of Households
Below the Poverty Level in 1980



Source: 1980 Census

TABLE 4

AFFORDABILITY INDICATORS FOR SELECTED COMMUNITIES

	Estimated Mean Household Income 1986	Ratio of Community Median Single Family Price/Mean Community Income	Ratio of [Community Median Single Family Price/Community Mean Income] to [State Median Single Family Price/ State Mean Income]	Percent of Stock in Subsidized Housing	Median Single Family Housing Price	Mean Single Family Housing Price
Cambridge	27,393	7.67	2.04	17.1	210,000	342,339
Somerville	25,176	7.16	1.90	10.9	180,250	221,350
Boston	25,319	5.73	1.52	20.3	145,000	344,256
Lowell	26,174	4.78	1.26	16.4	125,000	159,735
Wellesley	61,655	4.54	1.20	4.5	280,000	336,602
Worcester	24,775	4.54	1.20	15.5	112,500	158,857
Fall River	19,882	4.52	1.20	17.8	89,925	109,305
New Bedford	20,308	4.14	1.10	14.9	84,000	104,454
Dover	84,719	3.72	0.98	0	315,000	337,906
Springfield	23,356	3.30	0.88	16.8	90,000	100,898
Lee	29,627	2.82	0.75	0	83,500	110,591
Pittsfield	29,142	2.79	0.74	9.3	81,370	104,666
State	32,547	3.78	1.0	8.7	123,000	172,787

single-family stock. Similarly, only 15 percent of the stock in Old Colony and 17 percent in Merrimack are affordable by the median-income family. Interestingly, only 19 percent of the stock is affordable in Northern Middlesex, despite its high income. Franklin, the Berkshires, Montachusett and Lower Pioneer are again the most "affordable" areas. Indeed, in Franklin 61 percent of the single-family homes can be afforded by the median-income household.

Condominiums

Condominiums are somewhat more affordable than single-family homes, as seen in Exhibits 11 and 13. For the state overall, 43 percent of all households and 34 percent of renter households can afford a median-priced condominium. (This compares with 33 percent of all households and 21 percent of renter households who can afford a single-family home.) The patterns of variation in affordability across planning areas are generally similar to those for single-family housing with two notable exceptions: in both the Berkshires and Franklin, condominiums are more expensive than single-family homes. (Sample sizes for condominium sales are fairly small in both these areas. The 1986 sales also represent a large share of the existing stock of condominiums, suggesting recent sale of large, new developments.) A high proportion of these sales particularly in the Berkshires, may be represented by second homes.

The Affordability Gap

Exhibits 14 and 15 translate affordability comparisons into a dollar gap between the price a median-income family can pay and the median price in that planning area. Once again, housing is least affordable in the Metro Area and Merrimack where the gap for single-family homes is over \$80,000. Cape Cod, Old Colony, and Northern Middlesex also have sizable gaps, well over the value of median-income.

The gap for renters is even higher, again pointing out the difficulties of changing tenure. Many households in these planning areas are not even close to accessing most of the housing stock. In contrast, the relatively poorer communities of the Berkshires and Lower Pioneer have quite small gaps, while in Franklin, where single-family prices are very low, the "gap" is actually positive.

The affordability gap for condominiums, although generally less than for single-family homes, is still substantial in the Metro Area, the Cape, and Central and Southeastern Massachusetts. Finally, reflecting the switch in price relationships, the condominium gap is actually larger in the Berkshires and Franklin than the single family gap. (As indicated above, however, these data may represent recent sale of several expensive developments.)

Affordability of Single-Family Housing for Selected Communities

The planning areas are made up of many diverse communities; generalizations are thus fraught with problems. (The Metro Area, which includes incredibly different communities, is a good case in point.) However, income distributions used to form the key indicators are only available at the planning area level. Comparisons may nonetheless be made of communities based on an alternative indicator: the ratio of community median house

price to estimated mean community household income. Similarly, comparing this ratio to the same ratio for the state provides a relative ranking.

Table 4 presents a group of communities selected more or less at random to represent a range of affordability issues. Among this group of cities, housing is least affordable in Cambridge, Somerville and Boston. Incomes are relatively higher. Thus, in Cambridge and Somerville the ratio of median-price to mean income is nearly twice as high as for the state overall.

Wellesley and Worcester are "tied" on the affordability indicator, though they could hardly represent more diverse situations. Both income and housing prices are two and one-half times higher in Wellesley than in Worcester. Since it is difficult to conclude that Wellesley has affordability problems similar in nature to those for Worcester or Lowell, the problems associated with using any single indicator are evident. Other factors, such as income and poverty levels, must also be considered.

Similarly, while the ratio of price to income in Fall River and New Bedford is only slightly higher than the state average, incomes are very low. Dover, which is one of the wealthiest communities in the state, shows up as "average" for this particular affordability indicator. To identify truly needy households, income distributions at the community level are needed.

Rent Burden

The available data on rent are not adequate to provide a thorough or realistic picture of the distribution of rent burdens across the state. Therefore, four types of rent information were used in the study to at least provide an indication of the range of the problem. These include net rent (as reported for tax purposes); HUD's Fair Market Rents (FMRs); EOCD's Maximum Allowable Rents (MARs); and the unsubsidized rents paid by food stamp recipients.

Exhibit 16 shows the range of rent burdens calculated using MARs, FMRs, and welfare rents. Exhibit 17, based on net rent as reported for tax purposes, displays the distribution of rent burden by income class for the state. Overall, it appears that these rents understate actual rent burden, but the magnitude of the bias is not known. MARs (as calculated for planning areas) are generally slightly higher than FMRs, and food stamp recipients' rents are about one-half to two-thirds of the FMRs. All of these rents are probably below median. The data are still useful, however, for comparison across planning areas and income classes. Rent burden is highest in the Metro Area,

Lower Pioneer, Cape Cod, and Franklin.* Exhibit 17 confirms the findings of other studies by indicating the inverse association between rent burden and income. Although these rent burden distributions are likely to be biased downward, it is still clear that the lowest income renters face serious affordability problems.

According to these data, 27 percent of households with incomes below \$16,000 have rent burdens of 0.35 or greater and 11 percent have rent burdens greater than 0.50. In other words, rent burdens for these households consume more than half of disposable income, leaving only very modest amounts for the remaining necessities.

SUBSIDIZED HOUSING

One means of addressing the affordability problem is government assistance, both property-based (publicly owned or properties that are privately owned but built with government subsidized loans) or tenant-based subsidies (certificates or vouchers issued to families seeking housing). Exhibit 19 presents the distribution of subsidized housing across the planning areas.

It is not clear whether there is an association between the share of subsidized housing in the stock of the planning area and the "affordability" problem of that area. On one hand, an area with a major affordability problem, e.g., the Metro Area, does indeed have a high proportion of its stock represented by subsidized housing. Furthermore, among those areas also having serious affordability problems, Merrimack and Old Colony rank third and sixth in proportion of stock represented by subsidized housing.

These simple associations are not sufficiently illuminating to establish the relationship between the need for subsidized housing and its availability. First, there is an association between poverty and subsidized housing not "recognized" by our affordability measures. Thus, Lower Pioneer, which does not rank

* According to the sample data used here, renter income in the Franklin area is lower than would be expected in comparison with other areas. Thus, rent burden there may actually be overstated.

high among the "affordability" problems, has very low median-income; and it also has a high proportion of subsidized housing. In contrast, housing on the Cape is generally not "affordable," but the proportion of the stock represented by public housing is the lowest in the state.

The issue warrants further analysis and should be addressed at the community, as well as at the planning area level. Unfortunately, it is the intersection of the distributions of income and price which best describes relative affordability, and these statistics are not currently available at the community level. However, utilization of the community level affordability indices, in conjunction with income information and distribution of the housing stock by type of occupancy, should assist in the disaggregated analysis of need for assisted housing.

The proportion of the stock represented by subsidized housing for selected communities has complex origins. It appears to be related to both affordability problems and low income. There are exceptions, however. Cambridge and Boston both have a high proportion of the stock represented by subsidized housing. Somerville, which also has low affordability, has much less subsidized housing. On the other hand, Fall River and Springfield, which have low median-income but a lesser affordability problem overall, also have a relatively high share of subsidized housing.

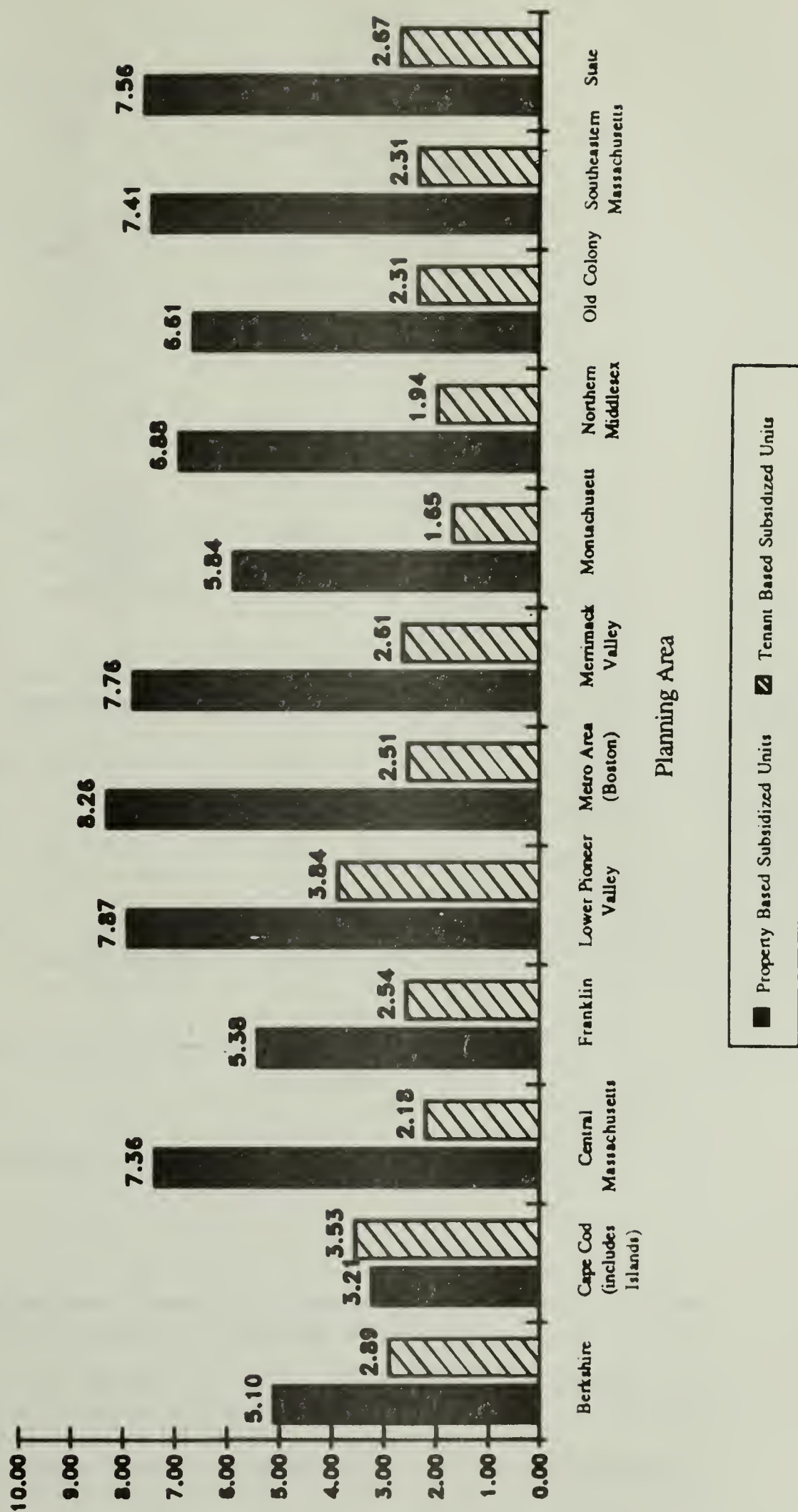
It is also clear that much has already been accomplished in meeting the state's need for subsidized housing. During the 1980-86 period, the state entered into contracts for the production of 8,100 dwelling units. An additional 1,300 units have been contracted for since. Including all state and federal production and rental assistance, there are a total of 222,349 subsidized dwelling units in the state. Thus, compared to an estimated statewide need of 376,517 units in 1980, it can be seen that, in static terms at least, 59 percent of this earlier level of need had been satisfied by the end of 1988. Table 5 shows the current number of assisted housing units in the state.

The need, of course, is anything but static. Numerous low-income households (Hispanic, Southeast Asian, Central American) have entered the state's housing market in recent months with unknown effects on housing quality and crowding. Quantifying all these factors is a task uniquely reserved for the 1990 Census.

HOUSING DEMAND

The state's total population increased by 1.7 percent, to 5,831,920 between 1980 and 1986. While population growth was modest, the number of households increased by 6.1 percent. Table 6 shows where these additional households are located. Household growth ranged from a low of 3.5 percent in the Pioneer Valley area to a high of 21.4 percent on Cape Cod. However, in absolute numbers, the Metropolitan Area experienced the highest increase, with approximately 55,200 new households added during the period.

Exhibit 19:
Property-based Subsidized Rental Units
and Tenant-based Subsidized Housing
As a Percentage of 1986 Occupied Housing Stock



Source: 1986 stock, based on 1980 data, updated using American Data For
(Ade Survey)
Subsidized Housing, data provided by MOH A, PACTD and HUD

Table 5: ASSISTED HOUSING, 1988
Units Occupied and Under Contract

		Total units -----
Federal Public Housing:		35,223
Family	19,574	
Elderly	15,649	
FMHA		1,105
Federal Private Housing:		27,393
Family	16,177	
Elderly	11,216	
Tax Credit		5,885
TELLER		1,612
HIF (1)		564
State Public Housing:		51,773
Family (Ch200 + Ch705)	16,786	
Elderly (Ch667)	33,146	
Handicapped (Ch689)	1,841	
MHFA		39,574
Low Rent Units	25,278	
Moderate Rent Units	14,296	
Subtotal Property-Based		163,129
Federal		41,513
Section 8 -LHA	30,883	
Section 8 -Non Profit	10,630	
State		16,230
707 certificates (2)	15,116	
State Vouchers (3)	1,114	
Subtotal Tenant-Based Subsidies		57,743
HOP		1,477
TOTAL SUBSIDIZED		222,349 -----

Source: EOCD

(1) Due to the transitional nature of emergency shelters and transitional units, they were not counted toward this total. Total HIF units amounts to 576 units and 103 beds.

(2) Total does not include certificates placed in units on SHARP, TELLER, FMHA, and MHFA developments to avoid double-counting. Total certificates issued amounts to 17,437.

(3) State vouchers have not been calculated for the planning areas, but have been included in the state total.

Table 6: Number of Households by Regional Planning Area
1980-1986

Regions	1980	1986	Change 1980-86	
			Households	Percent
Berkshire	52,400	54,997	2,597	5.0
Cape Cod & Islands	64,583	78,421	13,838	21.4
Central Mass.	154,017	164,680	10,663	6.9
Franklin	24,228	26,192	1,964	8.1
Lower Pioneer Valley	203,194	210,214	7,020	3.5
Metropolitan Area	1,040,096	1,095,329	55,233	5.3
Merrimack	92,524	98,249	5,725	6.2
Montachusets	69,688	74,469	4,781	6.9
Northern Middlesex	74,983	82,163	7,180	9.6
Old Colony	82,201	87,866	5,665	6.9
Southeastern Mass.	175,717	185,891	10,174	5.8
State	2,033,631	2,158,471	124,840	6.1

Exhibits 20, 21 and 22 show the ratio of population to occupied housing stock in 1980 and 1986; the ratio of adults to occupied housing stock for the same years; and the percent change in population in households as compared to the percent change in units. These exhibits indicate that throughout the state the number of people and adults per housing unit decreased between 1980 and 1986.

Cape Cod has the lowest number of people per housing unit (2.39), while Northern Middlesex has the highest (3.01). The Franklin Area has the lowest number of adults per household (1.79), and Northern Middlesex again has the highest number (2.01).

Exhibit 22 compares the growth rate in housing stock with the growth in population between 1980-1986. In all parts of the state the rate of growth in the housing stock has been higher than the rate of growth in population in households. (This trend is reflected in the decrease in average household size, as seen in Exhibits 20 and 21.) Lower Pioneer Valley had the lowest growth in housing units; this region also experienced a low growth in population (+0.2 percent). The Cape Area had a 21 percent increase in housing units along with a 15 percent increase in population in housing units. (These findings cannot be interpreted as a decrease in crowding, however, since data describing the distribution of persons per household are not available.)

Exhibit 20:
Ratio of Population to Occupied Housing
1980 and 1986

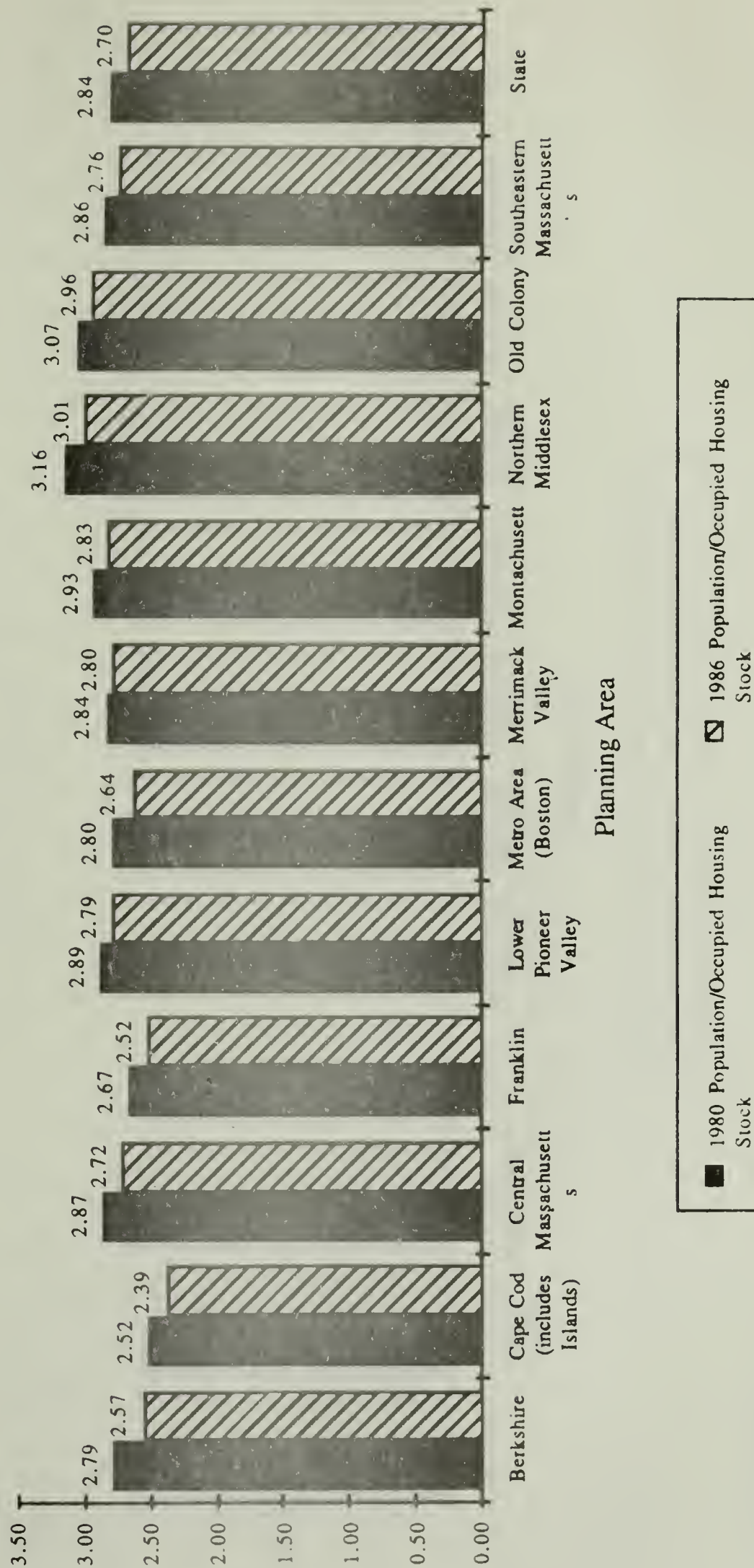
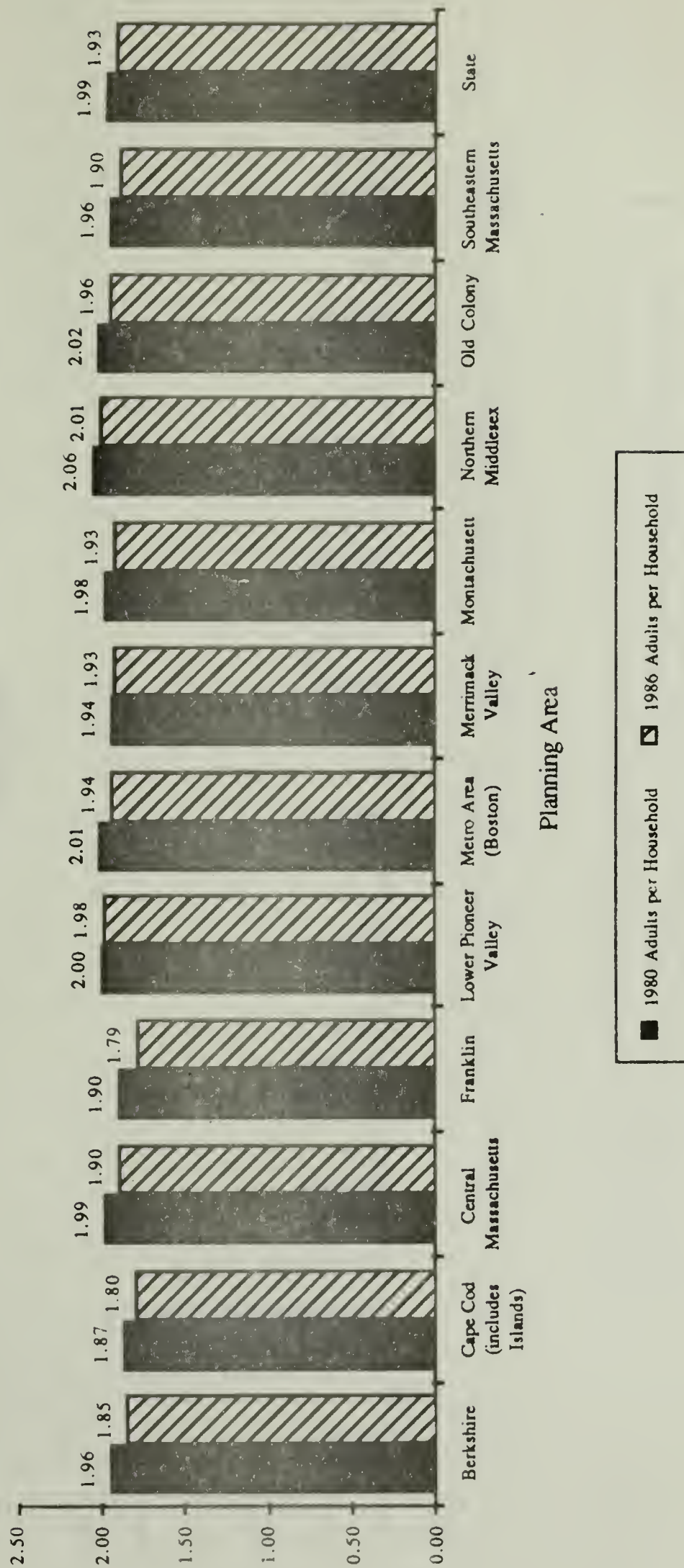
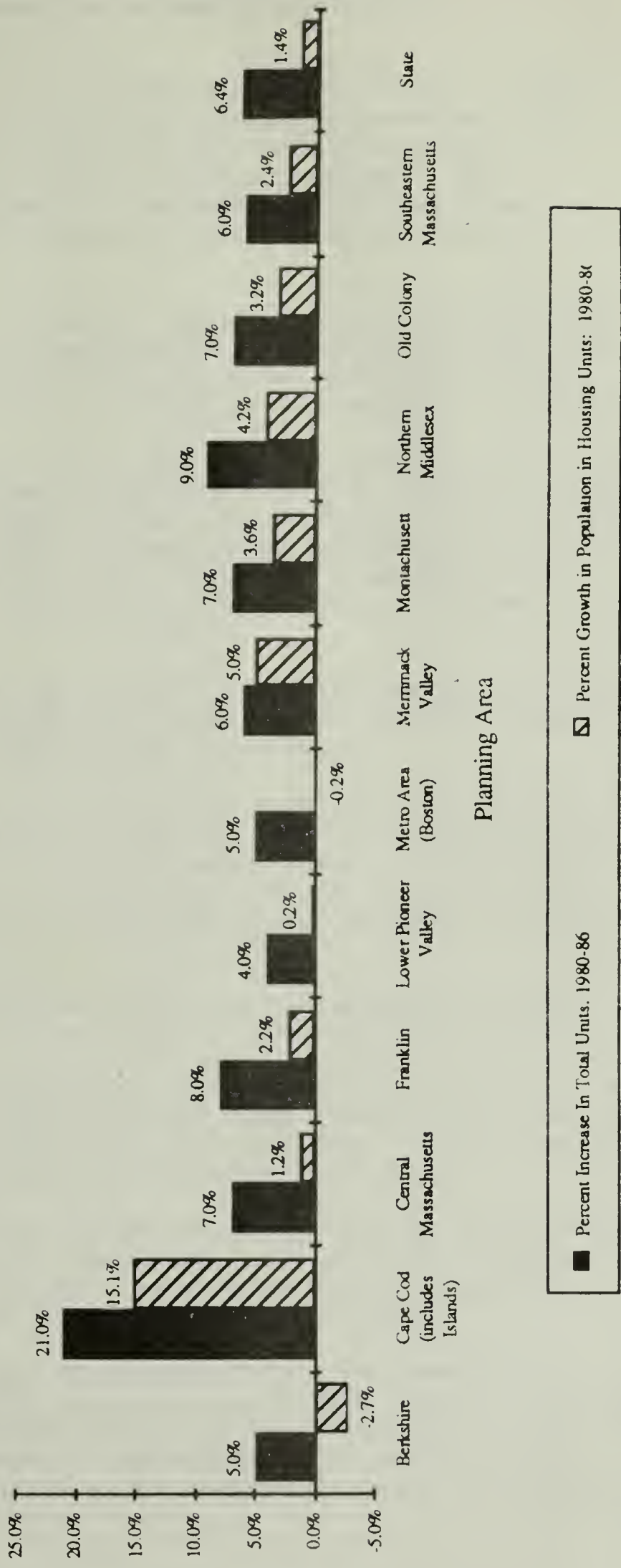


Exhibit 21:
Adults Per Household
1980 and 1986



Source: 1980 population figures, 1980 Census;
1986 population figures computed as
1980 Census and MIST-R data

Exhibit 22:
Percent Increase in Total Housing Units
and Percent Growth of
Population in Housing Units:
1980-1986



Source: 1980 Population and Housing Figures, 1980 Census
1986 Population Figures, 1980 Census and MISEJ
1986 Housing Figures, 1980 Census, American De
Form, Building Permit data, and Parcel Count Data

ASSEMBLING THE NEW EOCD DATA BASE

Data for this report were assembled from many sources. Data collection procedures and variable definitions are described in detail in the Volume III of the Abt Study, Data Documentation and Update Report, which is available on request from EOCD. This volume also presents a summary of the data sources used, as well as a discussion of the definitions and limitations of the analytic variables.

Data used from the 1980 Census include Summary Tape Files (STF) 2B and 4B for the State of Massachusetts. The Census data were used as the basis for the majority of the database, providing the 1980 population and housing stock, as well as basic demographic information.

Other data provided by the Census Bureau include the Building Permit Surveys (1980-1985) which were used along with 1980 Census and other data to estimate the current housing stock. The Census's Current Population Survey (1985, 1986, and 1987) was used to confirm the current household and housing stock estimates. Census estimates of community level per-capita income were used, along with MISER data, to estimate current household income levels.

Projections of the 1990 population age distributions were used as a basis for estimating 1986 population age distributions consistent with the Census Bureau's 1986 population estimates.

Moreover, Massachusetts Department of Welfare provided data on the tenure of Welfare recipients (whether they live in subsidized or non-subsidized housing). For Food Stamp recipients living in non-subsidized housing, rents paid were also reported. Data on tenant-based and property-based subsidized housing were obtained from HUD, Massachusetts Housing Finance Agency, and EOCD.

EOCD also provided income and rent data on a sample of owner and renter households which were obtained from other state agencies.

The Massachusetts Department of Revenue provided fiscal year 1988 property parcel counts, which were used along with Assessors' Data and Building Permit data to update the 1980 Census data. These sources were used to arrive at an estimate of the current housing stock.

A private organization--County Home Data--included sales transaction data for conventional single-family home and condominium sales for 1986. These data were used to estimate costs of recently purchased homes, as well as in the computation of affordability indicators.

A mail survey was sent to assessors in all 351 communities in Massachusetts to obtain data regarding condominiums that was unavailable from other sources. Responses were received from 267 local assessors providing data on the number of condominiums, the number of owner occupied units, new construction and conversions from non-residential buildings (adaptive re-use).

Regional Planning Districts

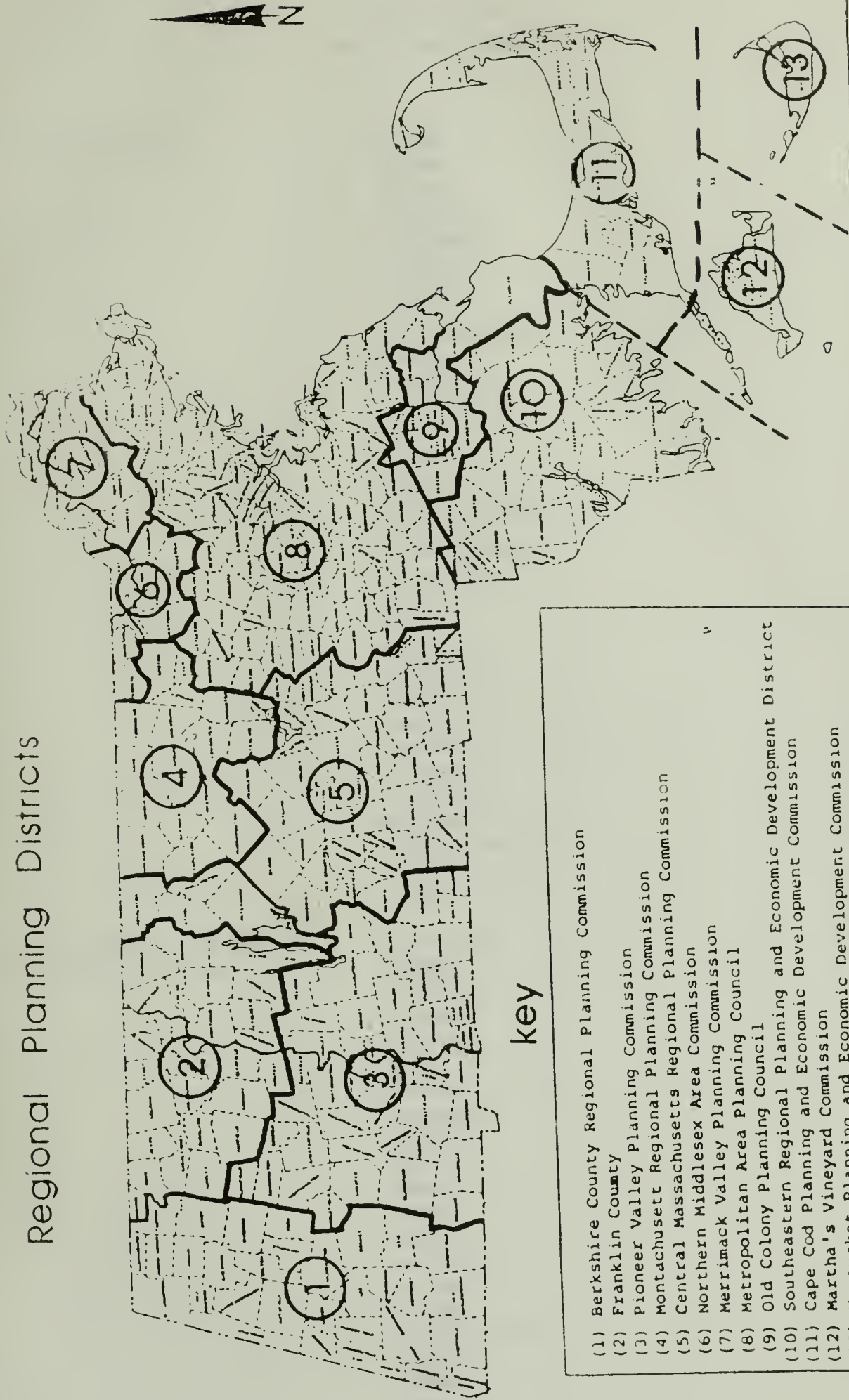


Exhibit 24

PLANNING AREA/COMMUNITY

BERKSHIRE PLANNING REGION

ADAMS
ALFORD
BECKET
CHESHIRE
CLARKSBURG
DALTON
EGREMONT
FLORIDA
GREAT BARRINGTON
HANCOCK
HINSDALE
LANESBOROUGH
LEE
LENOX
MONTEREY
MOUNT WASHINGTON
NEW ASHFORD
NEW MARLBOROUGH
NORTH ADAMS
OTIS
PERU
PITTSFIELD
RICHMOND
SANDISFIELD
SAVOY
SHEFFIELD
STOCKBRIDGE
TYRINGHAM
WASHINGTON
WEST STOCKBRIDGE
WILLIAMSTOWN
WINDSOR

CAPE COD (CAPE, MARTHA'S VINEYARD, NANTUCKET) PLANNING REGIONS

BARNSTABLE
BOURNE
BREWSTER
CHATHAM
CHILMARK
DENNIS
EASTHAM
EDGARTOWN
FALMOUTH
GAY HEAD
GOSNOLD
HARWICH
MASHPEE
NANTUCKET
OAK BLUFFS
ORLEANS
PROVINCETOWN
SANDWICH
TISBURY
TRURO
WELLFLEET
WEST TISBURY
YARMOUTH

Exhibit 24 (continued)
PLANNING AREA/COMMUNITY LIST

CENTRAL PLANNING REGION

AUBURN
BARRE
BERLIN
BLACKSTONE
BOYLSTON
BROOKFIELD
CHARLTON
DOUGLAS
DUDLEY
EAST BROOKFIELD
GRAFTON
HARDWICK
HOLDEN
HOPEDALE
LEICESTER
MENDON
MILLBURY
MILLVILLE
NEW BRAINTREE
NORTH BROOKFIELD
NORTHBOROUGH
NORTHBRIDGE
OAKHAM
OXFORD
PAXTON
PRINCETON
RUTLAND
SHREWSBURY
SOUTHBRIDGE
SPENCER
STURBRIDGE
SUTTON
UPTON
UXBRIDGE
WARREN
WEBSTER
WEST BOYLSTON
WEST BROOKFIELD
WESTBOROUGH
WORCESTER

FRANKLIN PLANNING REGION

ASHFIELD
BERNARDSTON
BUCKLAND
CHARLEMONT
COLRAIN
CONWAY
DEERFIELD
ERVING
GILL
GREENFIELD
HAWLEY
HEATH
LEVERETT
LEYDEN
MONROE
MONTAGUE
NEW SALEM
NORTHFIELD
ORANGE

Exhibit 24 (continued)
PLANNING AREA/COMMUNITY LIST

FRANKLIN PLANNING REGION (continued)

ROWE
SHELBURNE
SHUTESBURY
SUNDERLAND
WARWICK
WENDELL
WHATELY

LOWER PIONEER VALLEY

AGAWAM
AMHERST
BELCHERTOWN
BLANDFORD
BRIMFIELD
CHESTER
CHESTERFIELD
CHICOPEE
CUMMINGTON
EAST LONGMEADOW
EASTHAMPTON
GOSHEN
GRANBY
GRANVILLE
HADLEY
HAMPDEN
HATFIELD
HOLLAND
HOLYOKE
HUNTINGTON
LONGMEADOW
LUDLOW
MIDDLEFIELD
MONSON
MONTGOMERY
NORTHAMPTON
PALMER
PELHAM
PLAINFIELD
RUSSELL
SOUTH HADLEY
SOUTHAMPTON
SOUTHWICK
SPRINGFIELD
TOLLAND
WALES
WARE
WEST SPRINGFIELD
WESTFIELD
WESTHAMPTON
WILBRAHAM
WILLIAMSBURG
WORTHINGTON

METROPOLITAN AREA PLANNING REGION

ACTON
ARLINGTON
ASHLAND
BEDFORD
BELLINGHAM
BELMONT
BEVERLY
BOLTON
BOSTON

Exhibit 24 (continued)

PLANNING AREA/COMMUNITY LIST

METROPOLITAN AREA PLANNING REGION
(continued)

BOXBOROUGH
BRAintree
BROOKLINE
BURLINGTON
CAMBRIDGE
CANTON
CARLISLE
CHELSEA
COHASSET
CONCORD
DANVERS
DEDHAM
DOVER
DUXBURY
ESSEX
EVERETT
FOXBOROUGH
FRAMINGHAM
FRANKLIN
FREETOWN
GLOUCESTER
HAMILTON
HANOVER
HINGHAM
HOLBROOK
HOLLISTON
HOPKINTON
HUDSON
HULL
IPSWICH
LEXINGTON
LINCOLN
LITTLETON
LYNN
LYNNFIELD
MALDEN
MANCHESTER
MARBLEHEAD
MARLBOROUGH
MARSHFIELD
MAYNARD
MEDFIELD
MEDFORD
MEDWAY
MELROSE
MIDDLETON
MILFORD
MILLIS
MILTON
NAHANT
NATICK
NEEDHAM
NEWTON
NORFOLK
NORTH READING
NORWELL
NORWOOD
PEABODY
QUINCY
RANDOLPH
READING

Exhibit 24 (continued)
PLANNING AREA/COMMUNITY LIST

METROPOLITAN AREA PLANNING REGION
(continued)

REVERE
ROCKLAND
ROCKPORT
SALEM
SAUGUS
SCITUATE
SHARON
SHERBORN
SOMERVILLE
SOUTHBOROUGH
STONEHAM
STOUGHTON
STOW
SUDBURY
SWAMPSCOTT
TOPSFIELD
WAKEFIELD
WALPOLE
WALTHAM
WAREHAM
WATERTOWN
WAYLAND
WELLESLEY
WENHAM
WESTON
WESTWOOD
WEYMOUTH
WILMINGTON
WINCHESTER
WINTHROP
WOBURN
WRENTHAM

MERRIMACK VALLEY PLANNING REGION

AMESBURY
ANDOVER
BOXFORD
GEORGETOWN
GROVELAND
HAVERHILL
LAWRENCE
MERRIMAC
METHUEN
NEWBURY
NEWBURYPORT
NORTH ANDOVER
ROWLEY
SALISBURY
WEST NEWBURY

MONTAGUSETTS PLANNING REGION

ASHBURNHAM ASHBY
ATHOL
AYER
CLINTON
FITCHBURG
GARDNER
GROTON
HARVARD
HUBBARDSTON
LANCASTER
LEOMINSTER
LUNENBURG

Exhibit 24 (continued)
PLANNING AREA/COMMUNITY LIST

MONTACHUSETTS PLANNING REGION
(continued)

PETERSHAM
PHILLIPSTON
ROYALSTON
SHIRLEY
STERLING
TEMPLETON
TOWNSEND
WESTMINSTER
WINCHENDON

NORTHERN MIDDLESEX PLANNING REGION

BILLERICA
CHELMSFORD
DRACUT
DUNSTABLE
LOWELL
PEPPERELL
TEWKSBURY
TYNGSBOROUGH
WESTFORD

OLD COLONY PLANNING REGION

ABINGTON
AVON
BRIDGEWATER
BROCKTON
EAST BRIDGEWATER
EASTON
HALIFAX
HANSON
KINGSTON
PEMBROKE
PLYMOUTH
PLYMPTON
WEST BRIDGEWATER
WHITMAN

SOUTHEASTERN PLANNING REGION

ACUSHNET
ATTLEBORO
BERKLEY
CARVER
DARTMOUTH
DIGHTON
FAIRHAVEN
FALL RIVER
LAKEVILLE
MANSFIELD
MARION
MATTAPOISETT
MIDDLEBOROUGH
NEW BEDFORD
NORTH ATTLEBOROUGH
NORTON
PLAINVILLE
RAYNHAM
REHOBOTH
ROCHESTER
SEEKONK
SOMERSET
SWANSEA
TAUNTON
WESTPORT

